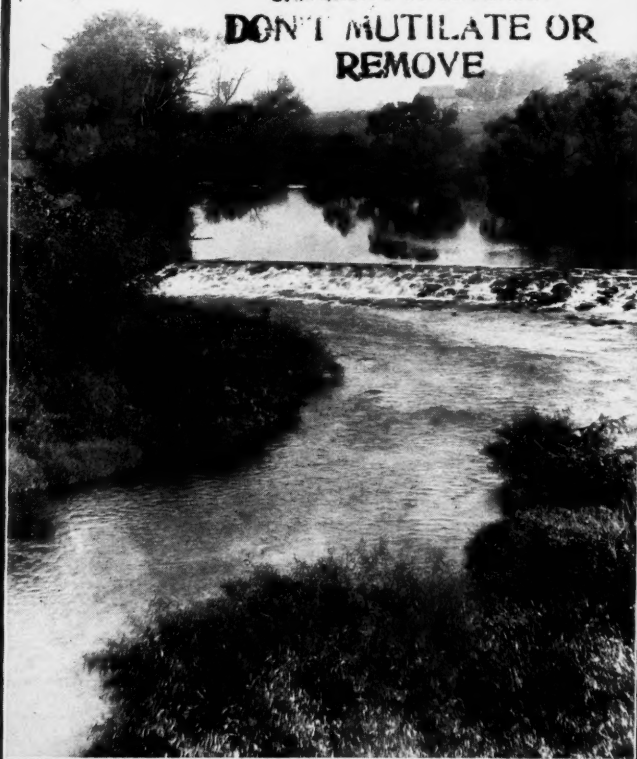


THE DENTAL DIGEST

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AUGUST 1926

VOL. XXXII, No. 8

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GEORGE WOOD CLAPP, D.D.S.
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THE DENTAL DIGEST

GEORGE WOOD CLAPP, D.D.S., EDITOR

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THE DENTAL DIGEST

Vol. XXXII

AUGUST, 1926

No. 8

Three-Quarter Crown and Bridge Technic*

(MAVES'S METHODS)

By A. W. Sears, D.M.D., Jacksonville, Fla.

The application of fixed crown and bridge restorations is one of the most satisfactory in our line of endeavor, and I know of no other branch of dental effort that is accomplished with more pleasure to both patient and operator than the taking of a badly mistreated mouth, infested with diseased areas and disfigurements, and restoring it to health and, as nearly as possible, to its original beauty. To the dental profession, as well as to our patients, this subject is of the utmost importance, for, as we all know from our own observations, great damage has been done by faulty construction and unwise application.

Among the chief causes of these disappointing results are: (1) faulty diagnosis and prognosis, and in many cases no attempt at them; (2) failure to remove foci of infection, and inattention to treatment and care of investing tissue and mouth sanitation; (3) disregard of tooth form; (4) absence of proper embrasures; (5) improper interproximal space; (6) faulty occlusion and articulation; (7) failure to instruct the patient as to correct nutrition to keep the body built up to a normal resistance.

The dental profession may be divided into three classes:

(1) Those who are partisan to the point of exclusion of all other types of construction except fixed bridgework.

(2) Those who are just as partisan in their adherence to the removable types of work.

(3) Those who use both types and endeavor to apply the one which, in their judgment, is the more applicable to the particular case presented.

I am quite sure that most members of our profession come under the third classification, using fixed bridgework whenever they can apply it satisfactorily and the removable type in cases beyond that line.

Judgment in any given case is most essential and is based upon a thorough diagnosis and prognosis. In arriving at such an understanding, a complete x-ray examination should first be made. The radio-

* Read before the Central District Dental Society, Daytona Beach, Fla., April 24, 1925.

graphs should be studied for foci of infection and the extent of bone destruction in pyorrhea, as well as for determining the thickness and strength of the alveolar process surrounding the teeth to be used as abutments. Upon this one condition the prognosis will largely depend. Edentulous spaces must be examined carefully for broken roots and necrotic sockets remaining from previous extractions where proper curettement was not resorted to, with infection still remaining. Radiographs also are valuable for disclosing hidden decay, especially under old fillings and crowns, at and beneath the gingiva. In addition to this examination, study models should be made and mounted upon an anatomical articulator. Such models will reveal the forces of occlusion and articulation so that a decision can be made as to whether the bite should be opened, whether certain teeth will require dressing down on the cusps, or a combination of both to give a balanced articulation.

Malocclusion must be corrected to the point of removing sound teeth, should such teeth be so out of line or elongated from disuse as to make a correct occlusion and articulation impossible. In many of these cases an orthodontist is of valuable assistance.

In all of our procedure we must never lose sight of the fact that we are dealing with the mouth as a unit, each tooth being but a part and having no value when it obstructs the function of the whole.

The foregoing principles are fundamental and necessary to the successful use and longevity of fixed restorations and, I may say, apply equally to the removable type. Couple the information thus gained with clinical evidence and you have a knowledge of the case upon which to proceed. In fact, you have a picture of the finished product in your mind, without which no one can be successful to the fullest extent.

Not only is it necessary to eradicate all foci of infection, but all deposits must be removed, faulty contacts and overhanging margins corrected, and, in fact, the elimination of everything that may make trouble for the investing tissue is imperative.

By proper prophylaxis and massaging, the gum tissue should be placed in a healthy condition and the patient instructed how to keep it so. Furthermore, the restoration we place, whether it be fixed or removable, must be so constructed that it may be kept sanitary by the wearer.

By faulty articulation we mean an articulation that is not well balanced, where in the lateral and forward thrusts of the mandible certain teeth bear all the force. Should such teeth be a part of the bridge, lameness is the result, causing an inflammatory condition of the periodontal membrane, gingivitis and subsequent loss of such teeth. This point is one to be determined largely when making the diagnosis upon study models.

Necessary to a proper occlusion and articulation is correct tooth form, and herein lies one of our weakest points. The more we study the human tooth, the more we must realize how far our best efforts fall short of reproducing it. Occlusal planes especially must be properly reproduced in order that bridges may function as they should. (Fig. 1.) The distance from the tip of the buccal cusp to the tip of the lingual cusp is in all molars and bicuspsids, unless they be worn down by abrasion, practically the same as the longest diameter of the tooth bucco-lingually at the cemento-enamel junction. How often do we see

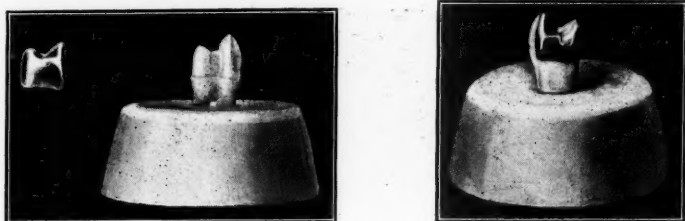


Fig. 1

this rule of nature totally disregarded, not only in crowns and bridges but in operative dentistry as well! The result is that we have unnatural forces brought into play not only by pounding on occlusal planes, but by striking on the contour of the tooth buccally to the high point of the cusps of the lower teeth and lingually to the high point of the cusps of the upper teeth, giving the patient a sense of lameness and, in many instances, producing symptoms akin to alveolar abscess, resulting oftentimes, if not corrected, in premature loss.

Many cases of bridgework are constructed without regard for the embrasures. In fact, we often see soldered contact as broad bucco-lingually as the abutments and dummies themselves. (Fig. 2.) Most of these cases show a straight line mesio-distally on the lingual surface from abutment to abutment. When we realize what strain we are plac-

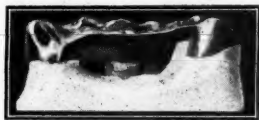


Fig. 2

ing on these abutments by tying them together and how we double up the stress under which they must labor, we shall recognize the necessity of giving them every advantage. That advantage is made possible largely by utilizing nature's embrasures. They form waste-gates

through which food passes during mastication, immediately relieving the teeth of their stress. In bridge construction these embrasures should be exaggerated and the transverse fissures always should divide the marginal ridge lingually to the contact point and be carried well to the gingiva. (Fig. 3.) The food escaping through the embrasures massages the gum underlying and aids materially in maintaining the health of that tissue. For illustration, in reparative dentistry where crowns and inlays of otherwise correct construction but having unbroken marginal ridges are used, diseased septal tissue is the result and



Fig. 3

is corrected by cutting the transverse fissure through these unbroken ridges, allowing the excursion of food for the stimulation of underlying tissues. Application of this one principle will go a long way toward obtaining a satisfactory result.

Very little solder should be used in uniting dummies with the abutments. The soldered joint should be small and circular in form, the contact point being its center, and should occupy only the occlusal third of the interproximal space.

Dummies should be tapered to a gingival end in excess of the natural teeth which they replace, and they are more sanitary if the tip end is made of highly glazed porcelain, which should rest preferably on the crest of the ridge or slightly to the buccal or labial, as the case may be. Enlarged interproximal spaces are obtained, through which



Fig. 4



Fig. 5

the bristles of a toothbrush and tape are readily passed, and these, coupled with the fact that the gum tissue takes more kindly to highly glazed porcelain than to metal, make for a healthy condition. (Figs. 4 and 5.)

To attain the foregoing results, I wish to mention the necessity of carefully-taken impressions as being of vital importance in the making of bridge dummies. In all bridge construction, especially where the cuspid and incisal regions are involved, a complete impression and models must be made of both the upper and the lower jaw, because in making an anterior case a good, hard model, made of cement, amalgam or some equally dense material, of the molar region above and below is just as essential as one of the opposing teeth, for to obtain a balanced articulation the molars on the opposite side are going to determine the length of the construction and cusp inclination.

The methods of operative procedure also have a bearing on the success of the operation of tooth preparation. Conductive anesthesia is used wherever the work cannot be accomplished without too much discomfort to the patient; but whether operating under anesthesia or otherwise, care must be used that the tooth in question does not become overheated. More especially must this be guarded against when it is under an anesthetic, for then the sense of pain is not present to give its warning.

The proper lubrication is best attained by a stream of water of 110 degrees Fahrenheit thrown upon the stone and tooth during the operation, thus keeping the entire field at the same temperature.

During certain phases of the operation compressed air is preferable, because then the vision of the field is clearer than with the stream of water; but, generally speaking, the major part of the time I prefer warm water to air.

During the interval between the preparation and the setting of the restoration the teeth in question always should be protected. This protection is best afforded by adapting a seamless copper or aluminum band to the tooth and filling it with pink baseplate gutta-percha.

When properly constructed and attention is given to detail and applied in small spans to abutments supported by strong alveolar process and of sufficient length of crown to afford frictional resistance necessary to stand the torsion under which they labor, we know that fixed bridges are good for many years with freedom from trouble and with health and comfort to the wearer, and I am far from convinced that under conditions as stated we have any other type that has proved their superior, allowing us to retain the vital pulp, which we must admit is the most aseptic root-canal filling.

Until such time as we can assure the patient of our ability to remove the dental pulp and treat and fill the root canal without the possibility of its becoming a focus of infection, we have no right to do so simply to make possible the application of a mechanical appliance.

One of the greatest problems we have today is that of nutrition and just what effect it has in regard to dental disease. However, I can

see no other way in the future but that the dentist must base his diagnosis and prognosis of each patient according to the interest the patient takes in himself. For example, if a patient with a mouth infested with disease and caries, due to unbalanced nutrition, should not show an interest toward correcting this abnormal condition, it would be unwise to make any attempt to restore his mouth with three-quarter crowns or fillings of any kind, for destruction of the teeth would be certain to continue as before, the margins around any kind of work would soon be broken down, and in a short time the dentist would get the blame for faulty work; whereas, in many cases, the loss would be due to neglect by the patient.

I wish, therefore, to stress at this time that prognosis will depend on a careful diagnosis and a close cooperation of the patient as to the dentist's advice in regard to mouth sanitation and a properly balanced nutrition.

In the construction of abutments for bridgework, the type of abutment will depend upon the health and anatomy of the teeth, underlying tissue, length of span and esthetics in the anterior part of the mouth.

One of the greatest advantages of the cast whole and three-quarter crown over the banded type is the continuity of the crown with the root surface, leaving no hidden recesses to lodge debris or cause any irritation from the metal on the soft tissue.

In the preparation of teeth for three-quarter crowns, after first removing the occlusal planes of enamel, determine the gingival margin. Then by removal of contour sufficient to allow the drawing of wax and placing back of the casting, if the anatomy of the tooth has been reproduced as nearly as possible and a gold of sufficient rigidity has been used, the question of strength will be eliminated.

In grinding the occlusal, small stones should be used and the surfaces should be cut down according to their original form and not cut flat, as this method may expose the horns of the pulp and reduces the frictional wall resistance one-third to one-half from occlusal to gingival.

The preparation of the sides of the tooth is accomplished by disks, stones and burs, according to the operator's choice, by simply dressing away sufficient enamel and dentine, and in many cases only enamel, until the crown will draw from the line where the gingival margin had previously been determined.

The finishing line is then definitely outlined, preferably with a small cylindrical-shaped stone. In determining this gingival line we are guided by Dr. Black's *Rules of Cavity Preparation*. When the gum tissue and crown are in their normal relation, the margins in the interproximal spaces must be carried just beneath the free margin. On the buccal and lingual the soundness of the enamel surface and your

judgment will decide where it shall be placed, preferably keeping it away from the gingiva as far as possible. Under any condition, when you must go to the gingiva, you should go slightly beneath it. When the gums have receded, apply the same treatment you would in any operative procedure whenever possible, keeping all margins occlusal to the cemento-enamel junction.

In the construction of three-quarter crowns and bridges several steps are necessary, and each step must be as nearly correct as possible in order to obtain proper results. In conclusion, I wish to lay stress on the following points, which must be observed if we expect to obtain the desired results in three-quarter crowns and bridges:

1. Cooperation of patient.
2. Diagnosis of existing conditions and prescription (decision as to what should be done), based on prognosis.
3. Proper selection of teeth and construction of abutments in such way as to assure strength.
4. Construction of bridges to reproduce as nearly as possible nature's work, observing contacts, embrasures, interproximal spaces, anatomy of dummies, so that sanitation may be provided for.
5. Proper articulation and contacts will determine the life of teeth supporting bridgework, if no fault exists in construction of abutments.
6. If this work cannot be so constructed by the operator as to assure the patient a few years of wear and comfort without the loss of supporting teeth, it is better that no attempt at construction be made.

Professional Building.



Are We Recovering From the Shock?

By Frank W. Sage, D.D.S., Cincinnati, Ohio

What a scare the English surgeon, Dr. Hutchinson, gave us years ago when he charged that we American dentists were causing all manner of germ infections, poisoning our patients' systems with germ products resulting from bridgework, root filling, etc.! Metaphorically, the accused lay in the dust with their hands over their mouths, no one presuming to offer protest.

If reports from an intelligent minority be true, a reaction has come about. Some of us hear fearless assertions that in many judiciously selected cases we may continue to treat infected roots, use them as piers for bridges, seats for pin crowns, etc. It all depends! The general health of the patient, his ready or slow response under previous similar treatments, and other considerations must influence the dentist's decision. Neurotics—recognized as such at a glance—the scrofulous, anemic, those physically degenerate in any respect, all must be set aside.

Some of us with little claim as scientists would like to know if in all this adverse criticism any statistics exist concerning thousands in middle or advanced life who had roots treated and filled in youth or later, yet who have always been free from any and all affections supposed to originate, in spite of the utmost care of the dentist, from operations of the kind. What dentist of many years' experience doubts that scores of his own adult patients might be found who, under examination, would confirm all this?

Dr. Price, of Cleveland, Ohio, of national reputation for scientific attainments, years ago declared in the Ohio State meeting the inability to sterilize infected roots to absolute perfection. Tests invariably betrayed infectious germs still present. Nevertheless, many dentists still treat and fill roots, those informed doubtless selecting their cases. Strange, indeed, how science's deductions have in the past sometimes been triumphantly set at naught!

We all know how not long ago old wisecracks declared navigation of the air impossible for lack of another element than air in which to operate. Then—airplanes! (Wonder how they accounted for birds flying.) When Stevenson introduced the locomotive, some English alarmists predicted that a speed of thirty miles an hour would be fatal to passengers. We seem to be defying all the old creeds. Even logic, we are told, limps occasionally. After all, however, we dentists may be merely dodging, not defying. So let us take heart, young brothers of the profession! Let us sterilize and get ready the discarded broach and nerve bristle, let us cheer the despondent young lady patient, tell her no forceps for her, at present, thus helping her to drive away hideous dreams, in which processions of porcelain ghosts mock her.

Yet we must discriminate, select our cases with more care than ever, steel our hearts against the tearful appeals of the scrofulous, the anemic, the degenerate as to physical endowment of whatsoever class. This brings us once more to a position beside the chair of our young lady friend, brings us to a consideration of an imaginary procession of swollen-faced or at least bandaged-face patients requiring relief. Now for it!

This molar, which has caused this balloon-like swelling, must go—*anesthetic, forceps*. We used to hear “old funkies” in dental conventions solemnly protesting against extracting such, perhaps exhibiting a special syringe, gold-mounted, with half a dozen curiously curved points for reaching the seat of the abscess through the gum. (No offence to “old funkies” intended—some of us who call names feel a bit guilty, afraid we may be found out.)

Same fate for pretty much all visible swellings from abscess! No use treating teeth, we think, which give evidence of infection beyond the tooth apex—useless, dangerous.

Then there is the apparently inoffensive blind abscess, not easily detected. Here are a few suggestions for identifying it:

If, on probing a root, there follows a free flow of pus, we may decide the case incurable. You beginners easily recognize this. Frequent swabbing of root with cotton, and still a flow, diminished perhaps, but still persisting! For weeks, months, dentists used to treat these cases with no cure.

In other instances the evidence is of another description. The root, being swabbed, yields only a little pus, yet after two or three treatments the strong offensive odor is not lessened. Again, *forceps*!

In short, it would seem that only recently decomposed pulps are not attended with beyond-the-apex infection. Therefore, if this be true from a scientific viewpoint, and not merely from such clinical observations as we are now making, comparatively few roots containing dead pulps can be safely treated and filled. The few, then, it must be that have given no unfavorable after-results. Good fortune has attended the operators of the past who followed no exact standards in the selection of cases. Or maybe their seriously infected subjects all died. It's like getting rich—after a few years no questions are asked.

We note, then, that from clinical observations alone we may fairly discriminate, may feel assured of no serious error in our selection of favorable cases.

I have been surprised, more than surprised, on detecting in a few dentists of reputation ignorance of pulp conditions resulting from caries. We are not surprised when a physician seems all at sea to account for a tooth's aching after death of the pulp. Medical students no doubt may sometimes be found playing billiards just as do dental

students, so that they miss certain minutiae of the professor's lecture. I heard a dentist who had been years in practice openly deriding a patient who nearly upset his chair when he thrust a barbed broach into a root. "You're silly," he jeered. "Why, man, the nerve is deader than a door-nail. I examined it with my magnifier—you saw me—and the surface of the pulp is all ulcerated, a little pool of pus." To be sure! Some other dentist, up on histology, might take this dentist aside where the patient could not hear and whisper to him that under an ulcerated surface of an exposed pulp may be a half-congested, inflamed, exquisitely sensitive mass into which it is simply barbarous to thrust a broach.

Now this dentist, this cruel ignoramus, was widely known, trusted by many patients, skillful in any and all branches of the dental art, but lame on dental histology and pathology.

"Well, what can be done with such cases?" young Dr. Howizit asks. "I've had two or three just like that, and I was at my wit's end to know. Arsenic only made matters worse. Had to extract one; my patient wouldn't listen to any other suggestion and fairly roared, 'Out with it. I've had my fill of it. Out with it!'"

We don't wonder. Hundreds, perhaps thousands, of dentists long in practice find themselves balked, annoyed by such ought-to-be-dead pulps. This is no trifling matter. It is highly prejudicial to the dentist's interest and welfare to shock and terrify a patient by rough usage. The story of his inhuman treatment goes afar. . . . "Oh, don't you think of such a thing, not for a moment. Going to Dr. Blank? Cruel beast—he nearly killed my husband!" So a dozen, a score, come to hear of it, and Dr. Blank perhaps says some evening to his wife, "We must try to economize more. For some reason practice seems to be falling off this winter."

Two or three ways are open to the conscientious dentist. Anesthetize and extract. Using a very sharp spoon excavator, scrape the dentine at a safe distance from the pulp in order to get below the infected surface, if possible, then carefully apply devitalizing paste. Seal up for days, a week. If severe aching ensues, it means—well, it means it won't do!

Analgesia, for dentists who have the apparatus, need only be mentioned.

For certain patients, heroic ones, scorning fear of a little pain, you may scrape the ulcerated surface at once, instantly following with pressure anesthesia.

"Old stuff—knew it all years ago," some may sneer. But the youth of the profession, the newcomers to our ranks, will not mind, even though it be only reminding. Lots of non-sensitive elders among the dentists neither know nor care. But it pays, it does pay, to gain the

reputation of never hurting at which some sneer. Not patients, but dentists—we are coming to it! Exodontists are triumphing over pain after a manner quite unbelievable a quarter of a century ago. And in view of that example, dentistry, really and without exception in all departments painless, will soon be insistently demanded by patients. The cry cannot be longer ignored.

Now that fine stones for sharpening razors are to be had at any drug or hardware store, the dentist has at hand a convenient means for putting a keen edge on excavators and hypodermic needles in a few seconds. Neither oil nor water is required. This need not be done while you are facing the patient, telling him an amusing story. He—she—dreading that keen edge, will fail to see any fun in your story.

The two- and three-rooted molars are the teeth to make us pause. I've seen one or two old-timers among dentists who were non-plussed upon discovering that of the three root-pulps one, the palatine, may be as dead as a twelfth century B. C. mummy, while the buccal branches, one or both, mustn't be so much as looked at—they are so sensitive and of all dead-and-alive "critters," as one dentist called them, the hardest to devitalize. Even at last devitalized, they are impossible to get out. Finest hair bristle tears out merest shreds. Dr. McKellops of St. Louis, of national reputation, said once in a dental convention: "The dentist who twists any kind of a barbed broach in a root canal is more courageous than I am."

However, we disregard this warning, we twist *and* twist, and get nothing but finest shreds. All the time we keenly suspect an impassable crook in the root. X-ray confirms the suspicion, so out with it.

So with lower molars—the flattened anterior root, with its double channels! No telling when the pulp is going to submit and die under arsenic. How much time-consumption has it cost the dentist?

It does not appear remarkable that all molars, once having decayed and ached, call for the exodontist's early service.

It was upon bridgework that the English surgeon directed his fiercest, most concentrated fire. He had discovered unsanitary conditions under bridges, had gone deeper and taken note of abscesses resulting, both blind and open abscesses, the former accounting in his judgment for many obscure diseases exhibiting signs of systemic poisoning. He probably gave himself no trouble to make intimate inquiry to account for the abscesses. The matter of interest to him was the discovery that in certain obvious ways bridgework was working the mischief. It remained for the dental profession to explain just what happens when ill-judged operations in bridgework are performed.

Every dentist knows of injudicious selection of cases, of imperfect or insufficient treatment of infected roots, etc. Still further back of all that, we must now consider that many years ago a Chicago scientist

of illustrious memory, Dr. G. V. Black, declared it merely a question of time as to the pulp of a healthy tooth dying, by reason of a considerable portion of the enamel being cut away for the convenience of filling. What must he have thought of bicuspid trimmed mesially and distally to a wedge shape, for convenience of alignment, for bridges?

"True enough," some may reply, "but the exposed surfaces, be it remembered, are to be fully protected by cement, wherewithal the shell crowns are to be filled before the final setting."

In turn, we say, "True enough," but just here another phase of the matter presents. It has been asserted that some cements may contain traces of arsenic, hence an added danger to be warded off.

More specifically, what Dr. Black said was that death of nerves under large fillings, even though no near approach to the pulp be made, is imminent. What then, finally, as to the much needed bridge?

I am offering tentatively a suggestion which may be found impracticable. Nearly or quite expose the pulp, if it must be that the tooth be mutilated as described, and, using either devitalizing paste or pressure anesthesia, get rid of the pulp. In a healthy tooth the pulp, as must have been observed rather frequently, is only slightly sensitive and may be devitalized readily enough, circulation seeming to favor. Most of us, having unfortunately exposed a healthy pulp, have noticed it to be rather insensitive. After such exposure dentine, a moment before sensitive, may be cut without pain. Let the scientists explain just why—we can only surmise.

Bridges we must have—patients will hear to nothing less. In vain you resist the urging of some most obdurate. "If you won't do it, I'll find a dentist who will," this man threatens. Finally you yield, telling him not to come blaming you, if it fails. In less than a year fail utterly it does, let us assume for the sake of argument. The stubborn fellow would not listen. Now there may be in all this even moral consolation for you. The man needed a lesson.

However, we must not mix business and sentiment. Leave the moral aspect of the case to others. The question of prime importance now to be considered is: Shall we occasionally destroy a healthy pulp in the expectation of forefending its dying later? Is what I am further to suggest worthy of serious consideration?

To proceed along practical lines—after devitalizing, seal with tannin, or its equivalent, allowing the pulp time enough so that a broach will fetch it all away at once. This may be attempted at least in five or six days. The vital necessity is for its entire removal before any soreness beyond the apex can set in. I have tried from day to day in a few cases. Careful, c-a-r-e-f-u-l, with your double-x bristles—dangerous!

The satisfaction a dentist derives from discovering that a pulp thus deliberately assassinated (!) is dead all the way to the apex is great.

Having got all out, insert cotton, with mildest detergent of some kind, to absorb any serum or liquid of any sort. After three or four repetitions the apex may be filled, with practically no risk of trouble ever after.

If there be any risk in this anticipatory treatment, it is surely less than the risk of treating in any instance where the tooth has once been made sore through infection.

22 The Parkside.



What Should a Medical Student Be Taught About Oral Infection?

By Stephen Palmer, D.D.S., Poughkeepsie, N. Y.

(Editor's Note: We have heard much about the necessity for teaching dentists certain fundamentals in medicine, and many of the arguments are well founded. Here is a sensible article on another phase of professional education. Most of us are fortunate enough to know one or two medical practitioners to whom we can teach something about the mouth and teeth. There may be several or many in any community who cannot or will not be taught. When medical college instruction includes the subjects listed here, conditions will be much better for both professions and particularly for the public. —G. W. C.)

In 1923 Dr. Charles Mayo gave a lecture before the American Institute of Dental Teachers, taking as his subject *What Should a Dental Student Be Taught Regarding Oral Infection?* which inspires me to select the subject for this article.

I will admit, at the beginning, the shortcomings of my associates in the dental profession and our ignorance of the subject of oral infection and its connection with systemic infection and ailments. At the same time I censor the medical fraternity for the attitude they have taken—a tendency to belittle the dentist's knowledge of the subject, placing parallel with that knowledge, meager as it may be, the utter ignorance of the medical practitioner of the subject, yet, owing to their prestige, exploiting their ignorance as superior to that of a dentist and often ignoring the opinion of dental practitioners, men who have given their lives to the study of dental conditions.

Owing to the past history of dentistry and due to such an attitude taken by the medical practitioners, the latter have been able to ram down the throats of the public or their patients that exalted idea of their knowledge of the subject, but I am thankful to say that today, and still more in the days to come, it is and will be harder for them to do so, as their clientele are now selecting dentists and relying upon their judgment dentally, regardless of their physicians' opinions.

There is not a doubt in the minds of the dental profession today that oral infection with its eradication is an important part of their daily duties to their patients. I believe they are living up to their duty, and I also realize that the ignorance of the medical men of the subject is making our lives rougher rather than smoother. The sooner the medical students are taught something about oral infection and its relation to systemic infections, the better for the public. Just as long as we have the ignorant general practitioner diagnosing oral infection

without any knowledge whatever of the subject, just so long teeth will be sacrificed, masticating ability will be reduced and the laymen will be maltreated regarding the oral cavity and the teeth.

I have practiced dentistry for many years, from the days when the dentist knew something (?) of oral infections, and the medical man did not, up to the present time when the dentist knows more about it and the medical man *pretends* to know more.

How often have I heard a medical practitioner say, "I don't know anything about the mouth and teeth, and I don't want to!" Yet soon after, I have reason to believe, he has told his patients that he knew all about it and has advised them as to the proper procedure, regardless of the suggestions of their dentists.

How often have I received instructions from such medical men to extract teeth for a patient because of pyorrhea conditions or apical infection, when upon examination the condition proved that all teeth were vital and that a prophylactic treatment was all that was necessary!

How often have I received radiograms from the medical radiographer condemning teeth as non-vital, when often I know from records and other proofs that they are not!

How often have I had doctors refuse to let me extract teeth from their own mouths or the mouths of some of their family, which I advised on account of infection, while for their patients they would insist upon extraction! Is that an act that proves that they are consistent in their advice to the laymen? Or is the advice given simply because it is along the line of least resistance and saves them the trouble and time of making an accurate and conscientious diagnosis, such as is due any patient?

What should a medical student be taught to think regarding dentistry, the oral cavity and the teeth?

He should be taught the value of a clean mouth and teeth, the value of every tooth and its functions in the great field of mastication, digestion, assimilation, health and strength.

He should be taught:

That, although dentistry has made great progress in the way of providing substitutes for sacrificed natural teeth, substitutes that are doing great service to humankind, no substitute constructed by the most skillful mechanic can fill the place and do the work of the natural teeth.

That an unclean, neglected mouth is not necessarily a pyorrhea-infected mouth.

That all crowned teeth are not infected teeth. How often we have reason to believe that teeth that are crowned are condemned simply because the crown is seen, without any knowledge of the tooth condition!

That not all devitalized teeth are infected teeth.

That a complete diagnosis, orally, cannot be secured simply from a set of radiograms.

That dental, oral or apical infections are not the origin of all systemic ailments, just because other causes cannot be found.

That if systemic conditions are traced to infections of the mouth, as pyorrhea, this is not a sufficient reason for condemning pyorrhetic teeth, one or all.

That pyorrhea may be the source of certain systemic ailments not caused by apical infections, and vice versa, and they should learn to differentiate between them.

That if systemic conditions are traced to one or more teeth which are diagnosed as infected, that is not sufficient reason for condemning any or all of the teeth in question, as infected teeth have been treated, systemic conditions eliminated and the tooth still retained and useful.

That the fact that a tooth or teeth are proved to be non-vital radiographically by showing filled roots is no reason for condemning the tooth or teeth, as many non-vital teeth are void of infection and still are valuable and serviceable.

That the fact that there is a rarefied area at or about the apex of a tooth is no reason for diagnosing said condition as infection, as often such area is caused by undue stress upon the tooth supporting a bridge, or from traumatic pressure, which after strain is relieved or pressure corrected will disappear and the tooth will be retained in a normal, vital condition.

That radiograms cannot be relied upon always to show infection, as often the area does not show, and one radiographic exposure is not sufficient to prove conditions.

That the condition of many teeth cannot be proved by one radiographic exposure, as all the roots cannot be shown on one film from the same angle.

That a patient suffering from a systemic condition traceable to oral or apical infection, at the age under fifty-five or sixty, may get relief from the elimination of said infection by the removal of the infected teeth or area, when from the age of fifty-five or older chances are against satisfactory results, and removal of teeth may destroy the masticating mechanism beyond satisfactory restoration mechanically, when many years of comfort may be saved the patient by retaining teeth of questionable infected conditions.

That after the age of fifty-five or more, if a patient has had a badly infected mouth and teeth for many years due to neglect or lack of attention, owing to comfort, the removal of said conditions will not of a certainty restore the patient to health. Therefore make no promises.

That many systemic conditions may be traced to inability to masticate food properly on account of mutilated dentures or malocclusion.

That after an infection of long standing, the extraction of the teeth or removal of the tonsils may not restore the patient to health, according to that eleventh-hour idea of cure by removal of the focus of infection.

That many conditions of systemic disorders have been eliminated by thorough treatments of infected mouth and teeth, and teeth have been retained for many years of usefulness. What has been done can be repeated.

Finally, that the only way to deal with the question is a complete rearranging of present conditions, so that there may be an understanding among medical practitioner, surgeon, radiodontist, dentist and all specialists of medicine, that they may meet on one common ground, review the history of the case from the point of view of each specialist and thus come to the understanding which will be for the welfare of the patient.

Quoting from Dr Mayo: "From the standpoint of incipency of diseases and its recognition, it is more important today that the dentist should understand disease and its origin than that the surgeon should understand it."

We will admit that the dentist should understand disease and its origin, but, from the dental point of view to coincide with that knowledge, we demand that the surgeon and the medical practitioner should know more than he generally does about the oral cavity and its condition and its influence upon the human body.

Why should a patient of seventy-five years of age be referred to the dentist for extraction of teeth to eliminate rheumatic conditions when he has had rheumatism ever since he can remember? Should the medical practitioner expect results from such a procedure? Such advice is based on a snap diagnosis from the medical point of view.

"There is more to be recognized in the small area of the mouth, in the way of the beginning of results of disease, even if due to nutritional change, than in any other organ of the body." This may be true, but, from my experience, just because men of Dr. Mayo's standing say this, many lesser lights in the profession are recognizing more diseases in the mouth than there are.

There is much to recognize in the mouth, and in order that the medical practitioner should recognize it, he should be given a course in the study of mouth conditions, in health and disease; there should be hours of dental histology, pathology, anatomy, and diagnosis added to the medical college curriculum and not left to be heard by an occasional (once in the life of a society) good-natured dental practitioner in a paper before a medical society.

I can see no reason why a medical practitioner should not be able to diagnose an alveolar abscess, at least when it has a fistula; why he should not be able to diagnose pyorrhea and differentiate between that and a neglected mouth; or why he should not be able to recognize in the mouth Vincent's angina, gingivitis, malocclusion, and broken-down and destroyed mastication.

I can see no reason why the medical student should not be taught the histology of the area of the mouth, the appearance of the border surrounding it in health and disease, the appearance of the maxillary sinus in health and disease; the location of various foramina, that they may not be taken radiographically for an apical abscess; the susceptibility of the antrum to the roots of some upper teeth, and which ones; the sinus conditions that may arise from dental conditions, and the process of their elimination; the neurotic conditions that may arise from non-erupted and impacted teeth and from irregularity which causes stress upon teeth in the wrong direction, and thus an abnormal pressure on nerve centers.

In conclusion, the condition which would arise if the cited conditions were realized would be Utopian, a condition much to be aimed for, but until it materializes the only way for humanitarian relief is for the medical man to recognize the dental surgeon as authority on mouth and dental subjects, just as the dentist recognizes the medical practitioner's authority on other subjects of medicine. What advice would the medical practitioner and the surgeon take from the dentist pertaining to bodily ailments in their fields of service? Why should the dental practitioner abide by their advice and decision?

As soon as the dental practitioners take a stand and, united, demand recognition on their subject and demand from the medical men such respect, the sooner will their road be smoother, humanity be benefited, and health and strength be increased.

272 Mill Street.



The Indispensability of the Face Bow and the Effect of a Short Radius in Full and Partial Dental Construction

By John G. Logan, D.D.S., Portage, Pa.

There is perhaps no other factor in denture work that has been the cause of so much trouble to dentist, laboratory technician or patient, and yet has been attributed to so many innocent causes, as an arbitrary mounting of models on the articulator.

It is only by the merest chance or accident that a balance in tooth contact in central occlusion can be obtained without using the radius of the arc which the mandible passes through as registered upon the articulator. Due to the near impossibility of constructing a full or partial case without opening or closing the bite, which our present-day method of "milling in" requires, the length of the mandible radius is almost an absolute necessity.

At this point a short explanation of what is meant by the mandible radius may not come amiss. The radius referred to here is the radius of that half-circle which we should develop if we should draw a straight line from the center of the condyle head to intersect, at right angles, a line drawn across the center of the anterior ridge of the lower jaw. The distance from the condyle head to the point of intersection of the transverse line is the length of the radius. The arc referred to is a segment of a circle we should describe by spreading a divider the width of this measurement we found and called the radius, and by putting one point of the divider over the center of the condyle head and describing a circle. This would be like a circle you might form by putting a salad plate or saucer in front of your ear and outlining the circle it would make. To some this may seem superfluous, but since all things are relative and that relativity radiates in many directions, it is well to make clear in what direction the thought is to be carried.

Many times has the writer heard the question outside the clinic or essayist's room as to what the speaker meant by "condyle path inclination," "radius arc," "rotation point," "Bonwill triangle," "curve of Spee," etc. Dentists are not all thinking along the same line, and it is not fair to assume they are; it is better that they are not, so we will clarify and attempt to create interest.

The question might arise—how do we get occlusion in bridge-work without the radius? We get it because we have the abutments in occlusion when mounted on the articulator, and we fill in the spaces without opening or closing the bite, hence the radius is not a factor. But since 99% of the dentists in denture work do close or open the

bite after mounting, it is of absolute necessity that they have a radius of at least greater length, if the absolute or correct one is not a certainty. In the absence of the absolute or correct radius, the radius of slightly greater length always puts the technician on the safer side because it insures initial contact on the posterior teeth. But, unfortunately, the radius is almost always short, as the prosthetist prefers a short and compact setting for his models and will usually mount them to conform with the fixed length of the lower member of the articulator. Especially is this true of the plane line articulator, and we are safe in saying that there are more of these in use than any other type.

Since this article is written for the average dentist, it is the writer's desire to make clear (contrary to the statements of some prosthodontists) that it is absolutely necessary to take face bow measurements, regardless of proficiency or articulator. You cannot control the contraction of the wax in which the teeth are set or the change that takes place in vulcanizing, and to attempt to "mill in" in the mouth is out of the question, unless you have a patient who will chew carborundum until the meniscus cartilage develops corns!

All full and partial denture cases must be set up with an open bite for milling in and settling, hence you must not have a short radius, though a slightly longer one is permissible.

A few years ago one of the oldest denture specialists in the West told the writer that the face bow was just made to "bamboozle" the dentists. How strange that a man would devote so much thought to a subject and yet overlook such geometrical truths as are embodied in the use of the face bow! He has written a book since then, and we note that he has changed his opinion.

The reason most men overlook this point is that there are so many other things on which to blame failure, such as the wax, the vulcanizing, and that panacea for all failures, the laboratory. We might add here that if Saint Peter ever accepts any man on the strength of his vocation, it should be the laboratory man, for he never gets half a chance. The models, impressions and bites which he receives are a positive disgrace to men who have had the training that dentistry requires!

But to get back from this deviation, the most probable cause of errors by an arbitrary mounting of models, and by men who give other phases of denture work more thought, is a lack of re-checking with bite wax after milling in and the assumption that all is well by a slight mouth examination of contact of teeth.

Whenever a case of a denture specialist comes under the writer's observation, a bite is always taken and the case mounted, if the patient will permit it, and an examination of tooth contact is made. The findings are sometimes astounding. One-fourth of the crown of the in-

cisors would have to be sacrificed if an attempt were made to grind them sufficiently to make the molars occlude. They used the face bow, too—what happened? They put the adjusting rods of the face bow anterior to the condyle heads or had a narrow face and sprang the face bow in position on the instrument, which shortened the radius.

We find that the general practitioner, who is working only along average lines, almost always produces dentures wherein the incisors get the initial contact with a discrepancy of as much as three millimeters between upper and lower last molars. While it is possible to get this result by not completely closing the front of the flask, it is not probable, since it is common practice to close the front of the flask first and force excess rubber through waste gates at the heel. Is it not

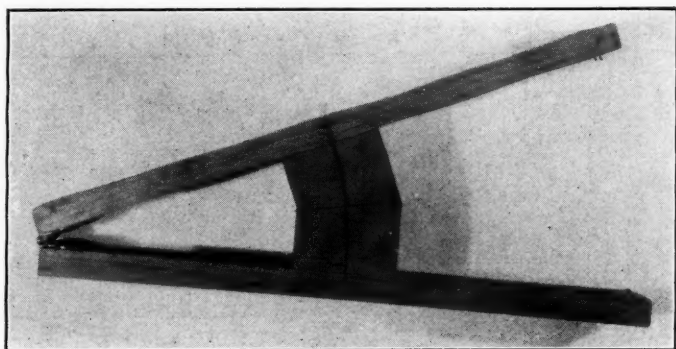


Fig. 1

fair, then, to assume that this is the direct result of a short radius? And we may state here that it is our opinion that the greater number of Class II and III mouths, with their flabby anterior ridges, are due to the force of mastication being shifted to the anterior teeth by this error.

Now, since the majority of dentists use the plane line or an average fixed instrument (and we question that it is average), all they can hope to get is a chop bite, in central occlusion only. Is it not better to have a balance in central occlusion, or at least the initial contact on the molars, than to have the incisors occlude first?

Do not those of us who are ultra-conservative in our selection of alveolectomy cases, and who have to make for patients with prominent anterior ridges and short upper lips a full upper denture, dispensing with the gum in front and as far back as the second bicuspid, with the necks of the six or eight anterior teeth imbedded slightly in the mucosa of the ridge, find that where the molars come in contact first when the denture is first inserted, the patient can scarcely keep it up

and yet within four days' time he has difficulty in removing it? This is brought about by a radius of slightly greater length on the articulator. This type of case would be a constant annoyance to both dentist and patient if the radius were short.

We can best illustrate the results obtainable by an arbitrary mounting of models on an articulator by a simple little device that proves these geometrical truths. We have, in Figure 1, two pieces of $2 \times \frac{7}{8}$ pine wood, 10 inches long, fastened together by a hinge at one end and separated to form an angle. Each of the pieces of wood that represent the rays or sides of the angle is grooved inside, and two tongued blocks, $1\frac{3}{4}$ inches long, are set in each groove and will slide back and forth. The blocks, before being inserted, were cut so that they would be in total contact in the center of the sides of the angle, and the plane of their

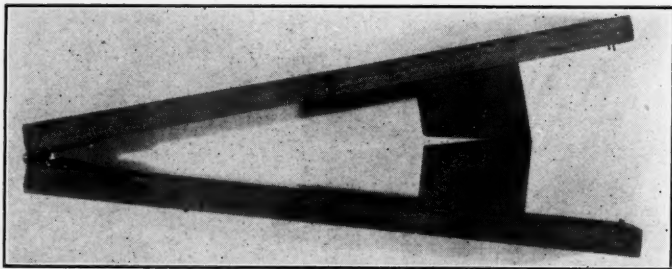


Fig. 2

intersection would bisect the angle. Now, let either side of the angle represent a radial arm. Then you will note that if we slide the blocks forward (Fig. 2), they will come in contact at their anterior margins only and there will be quite a space between the posterior margins not in contact. This varies directly as the distance moved and, to make their anterior and posterior margins or plane surfaces rest flat, we should be obliged to take twice as much off the anterior or contact margins as is represented at the posterior margins. This represents what occurs when models are mounted arbitrarily and there happens to be a short radius on the articulator. When you insert the case in the mouth, the teeth will occlude in front and the posterior teeth will not be in contact, because in the mouth a mandible has a longer radius than was registered on the articulator.

Now, to make the posterior and anterior teeth come in contact on a balance simultaneously, you would be obliged to grind off from the anterior teeth a portion twice as great as is represented in the space separating the posterior teeth and, therefore, partially or completely destroy the crowns of the anterior teeth. This condition can manifest

itself also in the use of the face bow and adaptable articulator, if the operator happens to get the engaging rods of the face bow anterior to the condyle heads, or has a patient with narrow face and he springs the face bow in position on the instrument. Both these errors will shorten the radius and throw the initial contact on the anterior teeth.

Let us see what will happen when we move the blocks backward toward the vertex of the angle. You will note, in Figure 3, that the posterior margins of the blocks are in contact and the anterior margins show a space between them. Now, to make the posterior and anterior margins come in contact or their plane surfaces rest flat, we should be obliged to cut just one-half the amount off the posterior margins as is

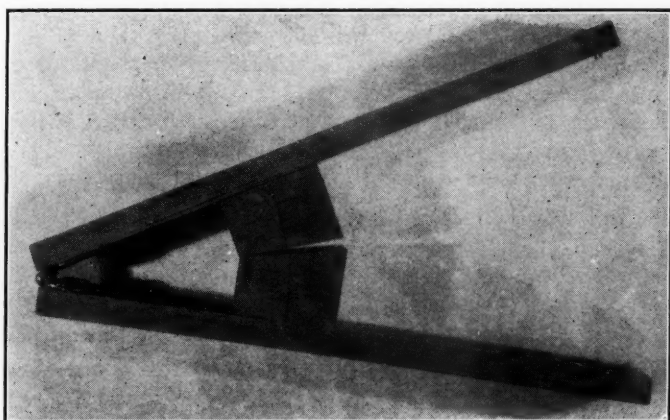


Fig. 3

represented in space on the anterior margins. This is what happens when we arbitrarily mount models on the articulator and get a longer radius than the mandible presents in the mouth. In most instances this error is correctible with slight milling, because if the dentures are two millimeters out of occlusion in front, you would need but remove or grind off one millimeter, or one-half the amount of tooth structure of the space shown in front, and most of this would come off the posterior occlusal margin of the second or the last molar. So it is evident here that in the absence of the absolute or correct radius it is advantageous to have a radius of slightly greater length on the articulator.

In conclusion, we wish to emphasize that in denture work you will avoid a lot of trouble for yourself and patient if you will use the face bow. This requires practically no skill. Just be sure that the points are over the condyle heads or slightly back of them, and never forward.

Though you may use a plane line articulator and do not hope to get more than central occlusion, put a knitting needle or stiff wire of sufficient length to engage the adjustable rods of the face bow through the pin holes supporting the hinge action of the articulator, slip the face bow over that, and then mount the cases. But if you have your work done by laboratories, measure the distance in inches, from the adjustable rod of the face bow to the anterior extremity of the upper model, by laying on the bench the face bow with model attached and drawing a straight line from the adjustable rod of the face bow to intersect at right angles a line drawn from the anterior extremity of the ridge on the model. The distance from the face bow adjustable rod to the intersection of the transverse line will be the length of the radius. You can send this measurement and instructions with your case to the laboratory and you will get much better results, for, bear in mind, there is as much as two inches difference in the length of the radius of the arc the mandible travels through in different patients.

This was written with the hope of lending some aid to those whom the spirit has not yet moved to take up the adaptable articulator and, therefore, render their patients the highest type of denture service.



Restoring Facial Contours

By S. A. Y. Dahlberg, D.D.S., Bay Minette, Ala.

Upon reading an article by Dr. Francis Scott Weir which appeared in *THE DENTAL DIGEST* some time ago,* in all of which I was very much interested, I was glad to see the profession taking up the line of work of restoring the appearance and expression of faces as they were when they had their natural teeth. Too many of us ram an impression tray full of plaster into our patient's mouth, then take a common biscuit bite, and send these to a laboratory with only the instructions to make a set of teeth, using Shade No. 1 (if the patient wants a white tooth) or Shade No. 15 (if he wants a darker one), and mark "Rush case" at the bottom of the letter. What can the laboratory man do? (I am speaking from my own experience, for I have been guilty!) The case is returned promptly by the good laboratory man, with teeth as regular as tombstones in a soldier's cemetery; we place them in the mouth and, when the patient closes his mouth, the lips fold up like an accordion. When he smiles or opens the mouth, it has the appearance of something machine-made. We instruct the patient to keep the dentures in the mouth night and day and tell him that he will get accustomed to them in from a week to ten years!

Since taking some postgraduate courses in this work, taking muscle-trimmed impressions and baseplate bites and having teeth to use which resemble the natural teeth, I have given this subject quite a study. I am sure I could not add to Dr. Weir's paper, but sometimes we see the patient before he has lost all of his teeth and natural facial expression, and it is of such cases that I wish to speak principally. The only thing I can suggest in edentulous cases is to have the patient bring with him a daughter or a sister, if possible. She will assist sometimes in the selection of shade, shape and arrangement of teeth.

If the patient is a regular patient, and I see that he will have to have all teeth removed now or sometime in the near future, the suggestions which follow apply to him also. A fee may be charged—it is legitimate and the patient will appreciate it when the reason is explained—or if the patient drops in before losing all of his teeth, explain the method and he will appreciate it.

1. In preparing for the arrangement of teeth, take a common biscuit bite in yellow wax. Run the lower half of this with plaster, pour some plaster on a slab and place the bite with the lower teeth. Run in the same batch of plaster on this batch on the slab, shape it up

* The article referred to was published in *THE DENTAL DIGEST* for April, 1924, under the title *Practical Esthetics*.

to extend back of the heels about two inches, smooth the top side and, when hard, cut some notches. Then coat this plaster with soap or separating material, box it in with wax or a piece of inner tube and run the upper separate and lay aside until you begin to arrange the teeth on the plate. The models can be run after the patient has gone.

2. Restoring facial expressions. Seat the patient in the chair and lay him back nearly flat, preparatory to taking an impression of the face. Take three $\frac{5}{8}$ -inch cotton rolls and tie the ends together; place the point of the triangle on the nose just below the eyes, with the base about an inch back under the chin. Cut off the rolls until the triangle will fit this way. (Fig. 1.) Next get two small rubber tubes



Fig. 1.

Cotton rolls and tubes in position.

about four inches long and stick the ends up the nose. Mix a large bowl of plaster thin, putting plenty of salt or something in it to hasten the setting. Have the assistant hold the tubes up off the face and the cotton snugly on the face and begin to pour plaster over the face. All smiles and frowns will disappear and the lips will assume their natural shape. Pile the plaster up until it is about one-half inch thick all between the cotton rolls. (Fig. 2.) As soon as it hardens sufficiently to be removed without crushing, take it off with the nose tubes in place. Remove the tubes, bore a small hole from the inside at the point of chin, nose and middle of nose. This gives a line down the middle on the outside. Cut a notch down this line until the plaster



Fig. 2.
Plaster poured, set, and ready to be removed.



Fig. 3.
One-half of the impression placed in position.

can be broken along the line. This has given the facial impression of the expression with the teeth in.

The next step is to send the patient to an exodontist, or remove the teeth yourself and save some of them, especially the uppers, as many incisors and cuspids as are left. With these and the plaster models of teeth you should have no trouble in selecting the shade and the mould of teeth.

After you have the models and bite block, begin to restore the facial expression. With bite blocks in place, try the facial impression on the face, using half at a time to see when you get the nose and the chin to fit in place. Add to or take off bite blocks, as the case may be. When the nose and the chin fit snugly in place, mark the bite blocks, place on the models and mount on a good articulator.

Place the plaster models of the natural teeth in front of you and arrange the artificial teeth to correspond with the plaster models of the natural teeth, giving them their individual characteristic twist or set. Build up on gums of baseplates to suit your taste.

When the patient returns, try in the mouth and then use the facial impression again, trying one half at a time, to see if the lips curve out in the proper place. (Fig. 3.) You can put on more wax where there is not enough and take it off where it is too full; you can actually put the lips in the curves in which they naturally were.

Let the patient have a side view of himself with one side of the face impression in place, seeing nose, chin and lips fitting in the impression. Be sure to show him both sides of the face, with the impression and the plaster models in front to look at. Your patient should be pleased!



Factors Influencing Mouth Conditions During Pregnancy*

By Jewell M. Gompertz, D.D.S., New Haven, Conn.

REPORT OF THE PRENATAL DENTAL CLINIC, YALE UNIVERSITY
SCHOOL OF MEDICINE

The factors causing decay of the teeth of pregnant women have never been adequately investigated. As diet may modify the texture and development of the teeth and the growing foetus places a special "nutritional drain" upon the mother, and as the mother's habits of diet may be altered during gestation, the question arises as to what extent the diet may be responsible for the disturbances of the mother's teeth and what beneficial effect can be rendered through diet. To what extent is dental work indicated or justified during the period of gestation?

The Prenatal Clinic of the School of Medicine, Yale University, has furnished opportunity to investigate in detail some of the abnormal mouth conditions during pregnancy, their possible causes and prophylactic measures with regard to them.

Each patient is subjected to a thorough and careful examination, and the results are recorded in detail upon especially prepared cards. Necessarily a part of the record is made up from history furnished by the patient. From the records of approximately two hundred patients, some of whom are from private practice, it is possible to draw the following conclusions:

The age of the mother, the number of pregnancies, and the economic status exercise little or no effect upon the condition of the teeth and the gums.

The dietary habits seem to make a difference in the mouth conditions. The women who are noticeably undernourished have more decay and periodontal pathology.

As a group, the foreign-born women who come to the clinic have better teeth than the American-born. Their diets generally include less meat and more vegetables. This difference in mouth conditions may be partly the result of a racial characteristic.

An effort has been made to prevent or remedy the mouth troubles of mothers during pregnancy. As early as possible, the mouth is x-rayed, seriously carious teeth are extracted, prophylactic treatment is given, and education is imparted as to the importance of the cleanliness of

* The paper of which this is merely a summary was read before the Preventive Dentistry Section, First District Dental Society, New York, January 15, 1926. The summary represents the effect of the paper and discussion upon one in the audience.

the mouth. If this procedure is followed from the beginning of the pregnancy, there should be no need for expensive dental work. If the patient is not seen until later pregnancy, whatever steps are necessary to put the mouth in a good condition should be taken. Only very extensive operative procedure is contra-indicated.

While patients are advised concerning their diet, the earlier in the pregnancy the suggestions reach the mother the better. A dietitian generally suggests the following daily diet regardless of the stage of pregnancy: one quart of milk, an orange and a salad, if possible; at least one vegetable, preferably green, besides potato; meat, fish or poultry but once a day; 6-8 glasses of water; tea or coffee, one cup each.

Patients are not urged to eat more than three meals a day, but it is often easy for them to take milk between meals. If the patient cannot tolerate a large quantity of milk, or if some metabolic disturbance makes a high fluid or high carbohydrate intake unwise, calcium may be given as calcium lactate.

Dentists, who often see patients earlier in the pregnancy than obstetricians, can make helpful suggestions as to the diet and the care of the mouth.

DISCUSSION

By Samuel Monash, A.B., M.D., D.D.S., New York, N. Y.

The subject presented by Dr. Gompertz is one which I have been very much interested in the past few years. It certainly is of the utmost importance that a thorough dental examination be made of every pregnant patient as early as possible. The usual dental operations are in no wise contra-indicated and can result only in good. As a matter of fact, many obstetricians connected with institutions where such practice is now routine are convinced that the number of cases of toxemias of pregnancy have been definitely diminished by this procedure.

I agree with him thoroughly also upon the need of a well-balanced diet for the expectant mother if she expects to bear a healthy and well-developed child. From the dental standpoint there is also no doubt that a deficient diet for the mother will adversely affect the composition and development of the growing teeth in the child.

However, the question as to what influence diet has upon caries and periodontal pathology in the formed teeth of the adult is by no means definitely settled. It has indeed been observed that the dentine in the formed teeth of scorbutic monkeys may become a softened mass. Toverud has reported changes in the chemical composition of the teeth of pregnant rats on a low calcium diet, resulting in a diminished ash, calcium and phosphorus content, but an increased magnesium content.

These analyses were upon the whole tooth and may well have been due mostly to dentinal changes, with practically unchanged enamel. This would tend to indicate that a very deficient diet may affect the structure of the denture and therefore hasten the process of decay, after the enamel has been penetrated.

At the present time, however, it is undoubtedly true that we see comparatively few individuals whose diet is as deficient as that used in the production of dental lesions in experimental animals, and it is questionable to what extent the tooth structure is affected by the ordinary slightly unbalanced diet. It would be interesting if Dr. Gompertz would take a series of pregnant women, determine the percentage of calcium, magnesium and phosphorus in their blood, and then, after changing their diet to the one he recommends, determine whether he has effected any changes in the composition of their blood.

Another possible factor in the production of caries during pregnancy is the frequent presence of inflammatory changes in the gingival and periodontal tissues. Such changes are not present in all pregnant women. When they are, however, they render brushing and proper cleansing of the teeth a painful procedure, thereby predisposing to neglect and caries. A few months ago, before another section of this Society, I endeavored to show that these inflammatory changes were probably due to an increased inflammatory response during pregnancy. The presence of calculus or other irritant, which normally would have provoked only a slight gingivitis, would in some individuals, during pregnancy, excite a tremendous reaction, resulting in some cases in extensive proliferation resembling tumors. The fact that this proliferative gingivitis of pregnancy begins to regress immediately after childbirth leads me to believe that the diet of the individual, while possibly a contributing factor, is not the most important one in its production. I believe that the underlying cause will ultimately probably be found to be due to changes either qualitative or quantitative in the secretions of the endocrine system.

DISCUSSION

By Mary Swartz Rose, Ph.D.

Professor of Nutrition, Teachers' College, Columbia University, New York, N. Y.

I am interested in the problems which Dr. Gompertz has brought forward, from the angle of nutrition. I should like to lay a little stress on the importance of getting a correct diet earlier in the history of the pregnancy than Dr. Gompertz usually has a chance to do. Two of the things that we have learned in our laboratory work are that it takes a long time to get results and that when we get an early start we can sometimes get better results than we really expect.

Last winter I had, for the first time, the opportunity to study a number of children of the better class, most of whom had been under the guidance of good pediatricians and whose mothers had learned their lessons pretty well. We examined their diets down to the smallest detail and found that they had what would ordinarily pass for good diets. Under more minute supervision the mothers reported improvement in the children from such apparently small things as the adjustment of the quantity of sugar in the diet.

Our studies have taught us that there is a long way between the minimum and the optimum in the matter of diet. In some features of the diet the optimum may be hundreds of times as great as the minimum. This seems to be especially true with regard to the vitamins.

We have had a group approximating fifty young children under observation almost daily for from one to two years. In these children we can make a fairly definite correlation between the diet and the teeth, the ones with the better diet on the whole having the better teeth. In another younger group we are studying the diet in the prenatal period and in the infantile period, and we hope to find out whether the children whose mothers had relatively poor diets will show the poorer tooth development.

In order that we may have utilization of calcium which is necessary to tooth construction, we must have those elements in the diet which foster the deposition of calcium. I think that, on the whole, we should anticipate better results in those diets in which a quart of milk is taken daily than in cases where calcium is taken in the form of calcium lactate, because in the milk there is a considerable supply of phosphorus and vitamins, both of which are essential to the advantageous use of the calcium.

As to the influence of nationality, we do not know what influence racial inheritance may have upon the situation. People who live in tropical countries have, in general, rickets less than those who live in countries with a smaller amount of sunlight. Dr. Hess has shown that in the tropics there are fewer cases of defective pelvis and of other deformities which interfere with manual labor, and which he believes are due to rickets in early life.

The earlier in life we begin with the education concerning diet the better. It is better to educate children about diet than to wait to educate the mothers, because the education of the children is the only way in which we shall be able to clear the road for the study of the problems of the influence of the internal secretions during pregnancy and childhood. Until we have a diet which we believe to be fully protective, how can we determine whether the symptoms result from a disturbance of the parathyroid or of the pituitary or something else? For instance, we have cases in which the diet of the mother and the

child has been safeguarded according to our best knowledge, but in which the second teeth of the child are irregular and some of them have not come through. Such evidence only proves that the problems in this field include much more than diet.

OBSERVATION

By H. J. Kauffer, D.D.S., New York, N. Y.

H. J. Kauffer reported that in 1920-1921 the teeth of 150 children who had been born in Central Europe during the period of depression and who were sustained on a poor diet and who had lived under a good deal of nervous strain were carefully examined. Greatly to the surprise of those engaged in the work, it was found that the teeth generally were in excellent condition, probably better than the teeth of children born here in the States. It was not possible to observe the condition of the mothers. The teeth were well formed, there was no caries and the whole condition of the child was good, so that our observations were negative as far as finding anything that we could check up with the diet or with the condition of the mother.



Togo's "Discursions"

Mr. Editor of Dental Magazine made 2% Digestible at Source

Hon. Sir:

Month of August conspicuous for sun strokes, mad dogs, vacation deficits & other phenomena also contains in A. D. year of 1926 notable meeting of International Dental Congress in city supposed to contain Brotherly Love, commonly called Philadelphia.

All Dental meetings are of some importance Mr. Editor but this one is considerably more so because of notable fact that it is first completely fraternal occurrence of such nature precipitated since colossal calamity called Great War was fought to what was once considered a draw but which is now universally recognized as only struggle in History in which all participants finally emerged as principal losers. (Circumstance just enumerated is difficult to explain but easy to understand with mind in sufficiently illogical condition at time attempt is made to do so.)

War is peculiar and highly specialized mistake made by brains in otherwise excellent running order & strange significance is fact that consideration of War Problems has disastrous result that nations engaged in such intellectual debauchery presently consider all mankind as possible or highly probable enemies & eventually somebody obliges by becoming so. Humanitarian efforts, however, induce exactly opposite products of Brotherly Love and Mutual esteem. Impossibility of disliking fellow man with whom you are working for good of others is apparent to any intelligence of ordinary Horse Power therefore great meeting such as presently occurring in Philadelphia is of utmost importance in matter of reducing War Risks & other incendiary Human tendencies among all nationalities in range of influence of love and mutual respect which will be created as proceedings commence to function & augmented as they continue.

Cost of dental caries & pyorrhea to long suffering Humanity which experiences them is greater per each annual year than submarine warfare & gas attacks recently discontinued owing to fatigue & possible bankruptcy of all parties concerned, therefore extreme desirability of mobilizing & coordinating Human effort against these silent destroyers of efficiency beauty & comfort must be apparent to all.

Dentistry of preceding years has produced wonderful results in manner of tooth fixing & general repairs when needed; however, new era of thought waves bearing on subject is now being received by most brains capable of intelligent perception somewhat as follows: "Instead of fixing tooth troubles when present why not attack all tooth disasters at source & prevent arrival if possible?" This is highly intelligent

analysis & will presently lead to results of amazing importance through truthful discoveries of many facts as yet unsuspected or indifferently understood. Possibilities discernible along shining path of future date are somewhat as follows.

Instead of paying price of Ford Coupe for gold inlays & porcelain jacket crowns to produce illusion of good teeth at age 35, greatly reduced sum will be expended in proper food purchases at tender age of 0 to 15 years.

Instead of consulting highly paid specialist in futile attempt to prevent distracting case of periodontoclasia from becoming plain & vulgar case of lost teeth, much smaller sums will be spent in purchasing food which may perhaps be useful in forcing some resumption of practically lost art of jaw exercise applied to chewing versus conversation.

Desirable results here pleasantly prognosticated can only come from enthusiastic & unselfish efforts of large number of men who do so because of love of subjects studied. Comparison of results & ideas are more readily possible at times of great gatherings such as International meetings & therefore all intelligences capable of either producing or receiving such commodities should be in attendance if possible.

Hoping you are the same

Togo.



Dentists As Citizens

By Mrs. Citizen

With indulgence rather than criticism the suggestion is sometimes voiced that the professional man, the college man of today who has prepared himself for some specific professional line of work, is self-centered, building his life around his own work to the exclusion of any public or civic interest. Some have gone so far even as to hint that he is incapable of understanding sound business principles and is inefficient in any line but his own.

The people of a small town of about five thousand inhabitants feel inclined to resent this unjust criticism. The facts of the case are that the dentists of *this* town fill all kinds of cavities—some of them might even assume the dimensions of caverns were it not for the faithful performance of duties which supply the void. Our dentists are on the job every minute, in and out of office hours.

We can say with pride that one dentist stands at the head of our Community Club, a business club of four hundred members. He is also President of the Chautauqua Board, not an average Chautauqua either, but one which ranks with the best in the country, one which owns its own grounds with modern conveniences, including a large steel auditorium seating thousands of people. This Chautauqua sells its tickets a year ahead so that it may know definitely that everything is paid for. He sometimes finds it necessary to close his office in order to look after this work properly and gets out and sells tickets as hard as any of the committee.

Another dentist is superintendent of one of the largest Sunday Schools in the town and, to prove that this does not interfere with his professional success, he was recently elected Vice-President of the state dental association.

Yet another dentist acted for many years as Secretary of the School Board, has held numerous offices in the Community Club and his attendance is reported as almost 100%.

Masonic work claims a dentist who is Master Mason and is devoted to the order.

A new man in the dental ranks of our town has been here only a few months, but he has lost not a minute in lining up with the municipal band and lending his help in a musical way. He became a member also of the Community Club and promises to be as enterprising as other members of his profession.

The story of our veteran dentist, one who is also a Civil War veteran, is not so easy to tell. It is no light task to give a picture of the usefulness of a man who has practiced dentistry in one town for fifty-three years. Perhaps the outstanding achievement in his com-

munity was his twenty-five years of eldership in the Presbyterian Church. He remembers only two vacations of any length and two serious illnesses. His five children are all college men and women and hold responsible positions. He is a rare type of gentleman. He has served his community well and though eighty years old still goes to his office every day to fill appointments.

It isn't all work, for our dentists are not "dull boys." Every Wednesday the keys are turned and they go to the Country Club to play golf and "drive dull care away."

Are dentists good business men and good citizens? Our town says they are.

Oral Sepsis and Heart Disease

What is the main cause of heart disease, now the most deadly and invalidating disease of civilization? The answer of the majority of medical men to this question will be probably rheumatism in all its forms and acute rheumatism in particular. In childhood acute rheumatism and scarlet fever play prominent rôles, and in all cases of what is known as toxic heart the condition of the mouth is a factor which must be always considered.

In a second edition of Sir Kenneth Goadby's book, *Diseases of the Gums and Oral Mucous Membrane*, published by Oxford University Press, the question of poisoned heart is dealt with at some length by the author in collaboration with Dr. Strickland Goodall, of London, the well-known heart specialist.

In reference to poisoned heart, Sir James Mackenzie in his *Diseases of the Heart* has this to say: "The muscle of the heart may be impaired by agents which infect it in the manner of a poison without producing structural changes, unless the poison is long continued, when by its persistent action it may lead to structural changes." As for treatment, Sir James says, "The appropriate treatment is to get rid of the poison. Simple as this proposition seems, yet it is wonderful to find how often it is neglected, or, if not neglected, how attempts are made to cure the heart as if it were something apart from the intoxication."

Goadby and Goodall have investigated numerous cases of so-called poisoned heart in which the origin of the poison was traced to diseases of the gums and jaws. Goodall points out that the term "poisoned heart" or "toxic heart" indicates neuromuscular impairment as distinguished from primary defects of the heart mechanism, although, of course, this latter condition may arise as a complication or a sequela . . .

Goodall shows a series of electrocardiograms illustrative of the profound action of various poisons upon the heart muscle: for example, the effect of large doses of digitalis producing coupled beats; impaired conduction and increased irritability of a heart subject to the attacks of paroxysmal tachycardia following influenza. Again influenza may produce a totally different effect, as seriously impaired conduction producing heart block. Poisoned hearts are common after influenza. Attention is drawn to the fact that in acute rheumatism evidence for the streptococcal origin of the poison is great. Moreover, in addition to the general poison effect there is some evidence of specific action. Thus in streptococcal infections, pericarditis may be a complication and may also supervene in certain other infections by the pyogenic cocci; whereas in diphtheria with its microbe cause strictly localized pericarditis is as yet undescribed. A poisoned heart may be a complication of chronic rheumatoid arthritis, admittedly associated with mouth infections. Goodall's series of electrocardiograms of persons suffering from oral sepsis demonstrate in a most illuminating manner that the effect of poisons of various grades is to induce changes of a profound nature in the functions of the cardiac muscle. . . .

There is, of course, no doubt that oral sepsis is often intimately associated with that condition known as "poison heart" and is a factor in its causation of the first importance. As to whether septic conditions of the mouth are secondary to those of the gastrointestinal tract is still a moot point. Many believe that the origin of a great deal of oral sepsis is gastrointestinal disorders and intestinal stasis in particular. However, it is certain that oral sepsis aggravates bad gastrointestinal conditions and vice versa. A vicious circle is formed which can be broken only by rational means. Sir James Mackenzie's advice to get rid of the poison and not to treat the heart only is manifestly sound. Oral sepsis should be remedied as far as possible and the gastrointestinal and urinary tracts should be cleansed to the utmost. Elimination and excretion should be rendered free. It is likely that poisoned heart is more common than is generally believed although the part that rheumatism is playing in producing heart disease is beginning to be recognized as one of the greatest menaces of modern life. By preventing poisoned heart from developing, much mortality, sickness and trouble of many varieties will be also prevented.—*Editorial—Medical Journal and Record.*



The Great International Dental Congress

The eyes of the dental world are now turned on Philadelphia, where everything is in readiness for the Seventh International Dental Congress, which convenes Monday, August 23 and will be in session until Friday, August 27, 1926.

Many of the 20,000 dentists who will attend the Congress are either en-route to Philadelphia, or are preparing to depart in the near future. Advices received by this journal from Philadelphia are that many dentists have already arrived, from North and South America, Europe, Japan, India and elsewhere. The early arrivals are occupying various ways the time intervening. Some are viewing the Sesquicentennial International Exposition and Celebration of the 150th Anniversary of American Independence, which is being held in Philadelphia this Summer; some are taking short tours preparatory to the opening of the Congress.

It is not too late for any dentist to make the decision to attend the Congress. Inquiries at the transportation companies will show special rates for travel to the convention city. Thousands of American dentists will travel by auto, the Lincoln Highway and other main arteries leading direct to Philadelphia.

Housing accommodations in the convention city will be ample. The Committee on Local Arrangements, working directly through a vigorous sub-committee on Hotels and Housing accommodations, will provide that all visiting dentists and those who accompany them are properly housed.

Those who do not attend will regret their absence for many a day. Dentists of this generation have a rare opportunity in this Congress of having laid at their feet the essence of the very latest thought in the general practice of dentistry, as well as in its specialties.

So wide is the scope of the Congress in a scientific and professional sense, that everyone attending will have an unparalleled opportunity to derive benefits that will last the remainder of his professional career.

The opportunity of meeting and being in contact with the stellar lights of the profession in this country and abroad is unexceptional. Entertainment to be provided is such that it will appeal to all. It will include receptions to distinguished dental scientists and practitioners and other dignitaries, banquets, tours to places of interest to dentists as well as other visitors, social functions, shopping tours, etc. for the especial benefit of the ladies accompanying the visiting dentists, etc.

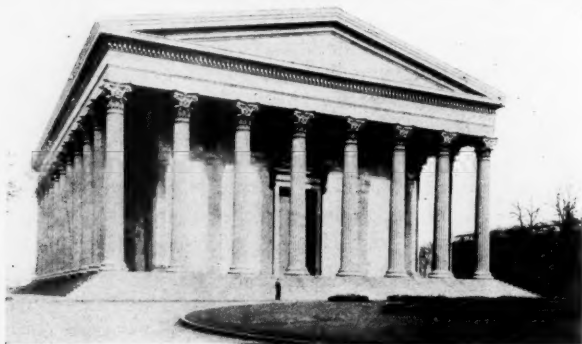
A visit to a city so closely related to the birth of this nation and its early history is alone an opportunity, made unusual by the fact that a national celebration of these historic events is now in progress.

Philadelphia is also rich in historical association with dentistry.

Here practised LeMaire, the French surgeon and dentist who is considered the first preceptor of dentistry in America; Gardette, a pupil of LeMaire; Hudson, who was instrumental in organizing dentistry as a profession; Koecker, early dental practitioner and author of works on dental practice. Here lived Charles Wilson Peale, famous early American painter, who in his latter years turned his attention to experiments which interested others in the development of porcelain teeth.

It is not definitely known at the date of our publication whether President Coolidge will be able to accept the invitation extended to him to open the Congress, but there is every assurance that if he is unable to do so, he will delegate a high official, probably a member of his Cabinet, to act for him.

The Government of the United States has taken cognizance of the



GIRARD COLLEGE

This College, founded under the will of Stephen Girard, is an institution for the rearing and educating of orphan boys.

Dental Congress by the passage by the U. S. Congress of a resolution authorizing the President to invite foreign governments to appoint delegates to the International Dental Congress. The resolution carried an appropriation of \$5,000.

This legislation at once places an official stamp upon the Dental Congress and lends to it a diplomatic character. Names of the appointees of foreign governments as delegates are being received by Dr. Otto U. King, secretary-general of the Congress. Dr. Pedro J. Valenzuela, of Chile, has been so empowered by his government, according to late advices, and so has Dr. Mitsuru Okada, of Japan, the latter having arrived already in Philadelphia.

President Coolidge has just appointed a body of prominent men to attend the Congress as official representatives of the national govern-



House where Declaration of Independence was drafted by Thomas Jefferson.

ment. This body is headed by U. S. Senator Henrik Shipstead, of Minnesota, who is a dentist by profession. Congressman Roy C. Woodruff, of Bay City, Mich., also a dentist, is a member of this body, as are Lieutenant-Commander W. L. Darnell, U.S.N., of the Navy Dental School, Colonel William H. G. Logan, president of the International Dental Congress; Dr. Otto U. King, secretary-general; Dr. Truman W. Brophy, Dr. Henry L. Banzhaf, Dr. W. A. Giffin, Dr. H. D. Friesell



CHRIST CHURCH

Located on Second Street, above Market, was founded in 1695, under a provision in the original charter of King Charles II to William Penn. Services in this church were attended by George and Martha Washington, John Adams, Benjamin Franklin, and Robert Morris.

and Dr. Sheppard W. Foster, the latter the president of the American Dental Association.

Few realize the magnitude of the organization of the Seventh International Dental Congress. The total number officially connected with the preparations is at least one thousand persons. These include the officers of the Congress, the Committee on Organization; the Local Committee on Arrangements; the officers of the scientific sections; the State Advisory Executive Committees, composed of the past presidents of the state societies from 1914 to date, and the representatives of the state dental examining boards; the past presidents of the American Dental Association and the Southern Dental Association; the past presidents of the National Board of Dental Examiners; the deans of the dental schools; the Committee on Clinics; the Committee on Exhibits;



CONGRESS HALL

Washington was inaugurated in this building for his second term as President on March 4, 1793, and John Adams for his first term as President on March 4, 1797.

the Committee on Essays and Clinics from Europe; the Committee on Historical and Scientific Exhibits; the Committee on Dental Hygiene and Public Health; the Governmental exhibit, etc.

It is conservative to state that this Congress will mark the most signal step in advance that dentistry has recorded up to the present time.

The Commercial Museum Buildings, in whose immense convention hall, the Congress will hold its sessions, and in which building will be held the dental exposition that is part of the Congress, and where also will be held the many clinics, are being given the final touches of preparation.

The convention hall is located in a part of the city which is within

ten minutes' street car ride of the city's heart and directly adjoining the campus of the University of Pennsylvania. The Thomas W. Evans Museum and Dental Institute are among the buildings nearby. The University student dormitories and student fraternity houses will be placed at the disposal of visitors to the Congress for living purposes. Modern hotels of large capacity, apartment houses and a vast residential district where rooming accommodations of all types can be obtained are located adjacent to the convention building.

There will be an extensive clinical program during the week, in which will be demonstrated the most advanced methods in dentistry. They will be given by clinicians appointed by the various state advisory committees and the deans of the various dental schools of America.

The Scientific and Historical sections of the dental exposition will be most exhaustive in comprehension of their subjects.



INTERIOR OF STADIUM

Looking from upper tier of seats from southern end of stadium, showing area where athletic contests and pageantry will be displayed, features of the Sesquicentennial Exposition.

The governments of the United States and foreign countries are extending noteworthy co-operation. The U. S. Government, for instance, is sending exhibits illustrating all phases of dental activity with which it is identified—such as those of its Army and Navy and its Public Health Service.

The U. S. Government displays will demonstrate many features never before stressed and which will be of great educational value. The War Department will, for instance, include in its exhibit a very complete display of maxillo-facial surgery, the result of experience in the World War of Army and Navy Dental Surgeons. The work of the Army Dental Corps will be shown, including pictures and models of clinics, laboratories, etc. There will be an exhibit of the research work of this branch of the Government service.

These are but a small portion of the large list of material of the highest interest to dentists which will be displayed.

Every dentist of distinction in the United States and Canada will attend the Congress. Among the eminent dentists who are coming from abroad are Professor Floristan Aguilar, of Madrid; Professor Wilhelm Dieck, of Berlin; Professor William H. Gilmour, of Liverpool; Professor William Guy, of Edinburgh; Dr. Vincenzo Guerini, of Naples; Dr. Ernst Jessen, of Strasbourg; Dr. Edmond Rosenthal, of Brussels; Dr. A. L. J. C. VanHasselt, of the Hague; Dr. Georges Villain, of Paris; Dr. Conrad Cohn, of Berlin; Dr. Angelo Chiavara, of Rome; Dr. Mitsuru Okada, of Tokio; Dr. Immanuel Ottensen, of Christiania; Dr. Paul Guey, of Geneva; Professor Alexander Limberg, of Leningrad; Professor Dr. B. Gottlieb, noted for his research work, of Vienna; Dr. Emil Steinschneider, of Vienna; Dr. Pedro J. Valenzuela, of Santiago de Chile; and many others.



First International Orthodontic Congress

HOTEL COMMODORE, NEW YORK, N. Y., AUGUST 16-20, 1926

Registration. The registration booth will be open Monday morning, August 16th, at nine o'clock and remain open the entire day. The hours for registration during the other days of the Congress will be announced in the program. Be sure to bring your membership card, in order to facilitate registration.

Transportation. The Transportation Committee advises that the members attending the First International Orthodontic Congress buy tickets via Philadelphia, as the summer Sesquicentennial rate is much better than the rate which would usually be granted by the Trunk Line Association to conventions. These rates and stop-over privileges can be obtained from any railroad agent in any part of the United States.

Hotel Reservations. While it is believed the Hotel Commodore (together with the Hotel Biltmore, which is under the same management, and which is reached by an underground passage through the Grand Central Station) will have ample accommodations for those attending the Congress, New York is always a crowded city, and your committee on arrangements advises that you make your reservations with the Hotel Commodore as early as possible.

Automobiles. Ample garage space is provided by the hotel in their privately owned garage a few blocks distant.

Banquet. On Wednesday evening the foreign members will be the guests of their American confrères at an elaborate banquet, which will be held at the Hotel Commodore. Further particulars of this will be found in the official program, which will be obtained at the time of registration.

Golf. The afternoon of Thursday, August 19th, will be the occasion of a golf tournament at the Westchester Biltmore Country Club, where the West Course has been reserved for the exclusive use of this tournament.

The tournament will be an eighteen-hole medal play handicap. There will be six prizes: first, for the low net eighteen-hole medal play handicap; two second prizes, one for the foreigner with the second lowest score and one for the American with the second lowest score. There will also be a first prize for the low gross score eighteen-hole medal play and two second prizes, one for our foreign guests and one for the Americans.

Arrangements for ample transportation facilities have been made by the Golf Committee. The Westchester Biltmore is, without a doubt,

one of the most magnificent country clubs in America and the golf courses themselves are rated among the finest.

Ladies' Entertainment. A special committee has been appointed to provide ample entertainment for those ladies who will accompany the members of the Congress.

On the afternoon when the men indulge in their golf tournament this committee has arranged for a day's outing at the Orienta Beach Club on the shore of Long Island Sound. Comfortable buses will convey the visitors from the hotel through the city parks and drives to this Club, where they will have an opportunity of indulging in tennis and bathing. Dinner will be served in the evening at the Club, at which time the men from the golf tournament will join them.

The committee has also made ample provision to provide for shopping guides and sightseeing for the ladies during the scientific sessions.

WILLIAM C. FISHER, *President*,
501 Fifth Avenue, New York, N. Y.



Annual Meeting

of the

AMERICAN DENTAL LABORATORIES ASSOCIATION

August Twenty-third and Twenty-fourth, 1926

HOTEL ALDINE, PHILADELPHIA, PA.

Monday, August Twenty-third, 1926

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|-------------|--|--|
| 9:30 A. M. | Meeting called to order | |
| 9:30 A. M. | President's Address | W. H. Schroll
Chicago, Ill. |
| 10:00 A. M. | Casting Technic and The
Uses and Abuses of Gold | George H. Sternberg
New York, N. Y. |
| | Discussed by I. J. Dresch, Toledo, Ohio | |
| 11:00 A. M. | Cost of Delivery and Postage | Byron Abert
Milwaukee, Wis. |
| | Discussed by E. L. Mueller, Omaha, Nebraska | |
| 11:30 A. M. | The Thimble Porcelain Bridge | Mr. M. W. Schneider
Chicago, Ill. |

Monday, P. M., August 23rd

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|------------|--|--------------------------------------|
| 1:30 P. M. | Suggestions Relating to
Requirements for Vulcanite Work | Dr. H. W. Kiess
St. Louis, Mo. |
| | Discussed by S. G. Supplee, New York, N. Y. | |
| 2:30 P. M. | Cost Finding as a Basis
for Laboratory Charges | Harry Fairbank
Boston, Mass. |
| | Discussed by W. H. Schroll, Chicago, Ill. | |
| 3:15 P. M. | Supervision and Inspection | Dr. F. G. Arnold
Birmingham, Ala. |
| | Discussed by Dr. C. E. Davis, Dayton, O. | |
| 4:00 P. M. | Minimum Karat of Gold To Be
Used by Laboratories | H. G. Rockey
Detroit, Mich. |
| | Discussed by B. I. Martinez, St. Paul, Minn. | |

Tuesday, August Twenty-fourth, 1926

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|-------------|---|--|
| 9:30 A. M. | Should We Be Order Takers or
Advisers and How Far Should
We Go In Assuming Responsibility | Henry P. Boos
Minneapolis,
Minn. |
| | Discussed by S. G. Supplee, New York, N. Y. | |
| 10:30 A. M. | Laboratory System | I. F. Miller
Pittsburgh, Pa. |
| | Discussed by E. L. Mueller, Omaha, Nebraska | |
| 11:30 A. M. | Everybody's Hour, Open Discussion | |
| 12:00 Noon | Business Meeting; Election of Officers | |

A cordial invitation is extended to all laboratory proprietors and technicians to attend the papers and clinics of each session.

I. F. MILLER, *Secretary*.

DENTAL LAWS

Summary of Dental License Requirements Throughout the World

By Alphonso Irwin, D.D.S., Camden, N. J.

SINALOA (MEXICO)

There is no dental law in the State of Sinaloa, Mexico, for practising dentists, nor is there any examining board of any kind. A dentist having a title from some recognized dental school in the United States may do the proper thing by having his title certified in the States before coming to Mexico, and then in Mexico City according to the Federal Dental Law, but in the State of Sinaloa this is not necessary. The only procedure you go through here is to certify your title before the Prefecto, who is the highest civil authority in the city. In this State there were a number of dentists who had no title, and up to the time of the revolution none of them had been molested in practising the profession of dentistry.

A diploma from any of the dental schools in the States is recognized here. By the dental schools is meant those recognized in the States by dentists as such. A person from a fake dental school might get along all right until they (the Mexican authorities) asked him to have his title certified, which of course he could not do. Though as stated above, the title may never be questioned. The Mexican Federal Dental Law may be enforced at any time.

SINKIANG

This country is Chinese Turkestan. China has no dental law or dental license regulations. (Unofficial.)

SLOVANES

Slovenes now forms a part of Jugoslavia or the Kingdom of Croats, Serbs and Slovenes. The form of government existing is reported to be a constitutional hereditary monarchy.

Medical supervision, degrees, standards, examinations are legal; also the national language and naturalization.

SMYRNA (TURKEY IN ASIA MINOR)

There are no laws which apply specifically to dentists as a class. Dentists are actually subject to the medical laws of this country, and in order to practise that profession the applicant must be in possession of a diploma, or pass an examination outlined by the authorities.

In the case of a person of foreign nationality having a diploma from a foreign university he may practise in Turkey, provided that the college is recognized by the Constantinople College of Dentistry. The diploma must then be legalized by the foregoing institution. According to the medical laws any graduate of a foreign medical college who may have his diploma legalized by the Constantinople College of Dentistry must practise for two years in a place indicated by the Government.

Until about three years ago dentists were not considered in the same class as doctors in this country. Practically anyone could practise dentistry upon the accomplishment of a few formalities. There is no American dentist practising in this city. Practically all of the dentists are of Turkish nationality. There is no dental school in this district, the nearest one being in Constantinople.

Verified May 13th, 1925.

SOCIETY ISLANDS

These Islands, located in the Pacific Ocean, with one Governor for several groups located at Papeete, Tahiti, are rated as French Possessions. Consequently French Colonial Dental Regulations are enforceable in them.

SOKATRA

Sokatra is an island off the East African coast under British Protection, which together with the Kuria Muria Islands, off the Arabian coast, are all attached to Aden. They do not possess interest to a dentist as a prospective location.

SOLOMON ISLANDS

The Solomon Islands, grouped with the Bismarck Archipelago in the Pacific Ocean, formerly German Possessions, have been placed under Britain by the League of Nations. British Colonial Dental Regulations are enforceable. Consult British Empire for other information.

SOMALILAND (BRITISH)

This section of country lying upon the east coast of Africa is a British Protectorate; consequently under English regulations (it contains 300,000 Mohammedans).

SOMALILAND (ITALIAN)

This part of eastern Africa, lying below British Somaliland, is a colony of Italy and under Italian Colonial Regulations. Both regions are populated almost entirely by native Africans, and possess little or no interest to the dentist, outside of the British or Italian missionary doctors.

SONORA (MEXICO)

Registration Requirements. Nogales, Sonora, Mexico. This district comprises the northern part of the Mexican State of Sonora, and we give a translation of such sections of the laws and regulations of that State governing the practice of medicine, dentistry and pharmacy as are pertinent. The law at present in force was passed October 19, 1921, and the regulations based upon it were put into force on November 11, 1921.

The important provisions are:

(1) In the State of Sonora a legally authorized diploma is indispensable for the practice of medicine, surgery, obstetrics, odontology, and pharmacy.

(2) Diplomas issued by the States of the Republic where exist professional schools organized according to law, and which diplomas have been validated by legally authorized Universities or Boards, are recognized in Sonora.

(3) Those foreign diplomas that have been revalidated by legally authorized Universities or Boards of Mexico are legally recognized in this State.

(4) Diplomas or licenses issued by any foreign political entity that by virtue of reciprocity permits the practise of the respective profession within her territory to physicians, etc., holding Sonora licenses, are legal in the State of Sonora without the necessity of taking examination.

(5) Those who are not included in the above articles and wish to practise in the State of Sonora any of the professions referred to in this law (medicine, surgery, obstetrics, dentistry and pharmacy), may not do it unless they are examined and approved according to the provisions of the regulations.

(6) In order to be admitted to examination, an applicant must make application to the Secretary of State at least one month before the dates of the examination (the 15th of January and the 15th of July); the applicant must send in his diploma with proof of its authenticity and he must prove by means of an affidavit from the highest authority in the place he last practised that he is a person of good conduct and recognized as honorable.

(7) A certificate of reciprocity may be issued by paying 50 pesos

to the General Treasurer of the State, plus 13 pesos more in the registration of documents, making a total of 63 pesos.

(8) In order to be admitted to examination before complying with paragraph 6, the applicant must pay the General Treasurer of the State 200 pesos, plus 13 pesos for registration of documents, making a total of 213 pesos.

The other articles and sections of the laws and regulations deal with details, such as composition of examining boards and others immaterial to the general outline.

The nature and scope of the examination in dentistry is not specified in the law and regulations, but is covered by the statement that it comprises those subjects that pertain to the profession.

As to the language in which the examination is to be conducted, the regulations provide that if the applicant does not possess sufficient technical knowledge of the Spanish language, but in the opinion of the examiners knows enough of the language to understand his clients and be understood by them, the examination may be conducted through an interpreter, who is to be paid by the applicant.

It may be of interest to note that in accordance with provision number 4 above, a reciprocity in practice is in force between the State of Arizona and the State of Sonora.

Politically this section of Mexico seems stabilized, but it still suffers economically from the effect of the years of disturbances. At present there appears to be small opportunity for dentists, there being a sufficient number on both the American and Mexican sides of the line.

Verified June 7th, 1923, by official communication.

SOUDAN

The Soudan is an Anglo-Egyptian Dependency.

Khartoum is the northern capital, the Governor-General is Sir Geoffrey F. Archer, K.C.M.G., who should be addressed for full information.

Consult also the dental law of Egypt. This country possesses little of interest to any but a missionary doctor.

SOUTH AFRICA

South Africa includes Northern and Southern Rhodesia and the Union of South Africa, the Cape of Good Hope, Natal, Orange Free State and the Transvaal form the Union. The Union of South Africa is sometimes referred to as "the flower of British democratic development." Each province possesses its own dental law and license regulations. Efforts have been made to enact a uniform dental law operative in all these provinces of the Union up to the last legislative session in

1925. Dentists now have to undergo their examinations in England or Scotland, and obtain the certificate of L.D.S. (Licentiate of Dental Surgery) before becoming eligible for registration in South Africa.

We quote the following from official sources: "The law in the provinces of the Union of South Africa affecting the registration of dentists has not yet been rendered uniform, but is controlled by the laws in force in each province prior to the formation of the Union. No provision is made for the examination of applicants, although all the provinces require registration prior to practice, each province maintaining a Medical Council which passes on the qualifications of persons desiring registration as dentists. No degrees are obtainable at present in South Africa itself which enable a citizen of this or other countries to practise, but on March 1, 1925 the *dental clinic* will be taken over by the University of Witwatersrand, and degrees will be granted locally." Address the Registrar of the University of Johannesburg, Union of South Africa.

Verified February 19, 1925.

SOUTH AMERICA

South America includes the following countries: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guiana British, Guiana French, Guiana Dutch or Surinam, Paraguay, Peru, Uruguay, Venezuela. All are Latin-American Republics except Guiana. The dentist who possesses a medical degree is regarded most highly in the Latin-American Republics.

Each Republic possesses its own dental regulations. Nearly all, excluding Brazil, interchange dental licenses, except when Treaties of Reciprocity are cancelled on account of war or disagreements requiring arbitration. Reciprocal relations have been established by treaty between Argentina, Chili, Colombia, Ecuador, Paraguay, and Peru, for native dentists, graduates of dental colleges located in one of the aforementioned countries.

The Guianas are regulated by the Colonial Laws of the countries controlling them, namely, British, French, and Dutch, in so far as it is possible to exercise police regulations in those countries. The population consists of negroes almost entirely, and dental restrictions are more noticeable for their absence than their enforcement in the Guianas. The following information comes from Latin America and gives the American version of Reciprocity. Reciprocal relations may be established between British and French Guiana, but Surinam is reserved for Dutch dentists, or naturalized citizens trained in the Netherland institutions, as a rule. In the other Latin American Republics (except Brazil), reciprocal relations have been extended to the Latin American

Republics of Central America as well as to Cuba, Mexico, Spain and even to Japan. The dental colleges of Spain and Japan are recognized in Mexico. Attempts have been made to establish reciprocal relations between the twenty-one republics of all the Americas—including the United States—but these attempts have proven transient or futile owing to differences in methods of training and recognized standards of education.

SOUTH AUSTRALIA

Each of the several states of Australia has its own dental law. The dental laws of South Australia are dated 1902, 1904, 1905. The English language, University Medico-Dental Supervision, examination and registration are required. The Dental Board consists of two Medical Doctors and four Dentists. Qualifications necessary for registration:

Section 19. Any person who is a licentiate in dental surgery of (a) The Royal College of Surgeons of England; (b) The Royal College of Surgeons of Edinburgh; (c) The Royal College of Surgeons, Ireland; (d) The Faculty of Physicians, Glasgow; (e) The Dental College, Sydney; (f) The University of Birmingham; or who (i) Holds such diploma, certificate or other title, status, or document as may be recognized for the time being by the Board as entitling the holder thereof to practise dentistry or dental surgery.

There are five other provisions in this section of the law which apply only to local dentists and credentials obtained in the State of South Australia.

Schedule of fees: On application for registration, three pounds three shillings; Certificate of registration, five shillings; Inspection of register, five shillings; Alteration of register, five shillings; fee for examination, six pounds six shillings.

For other information apply to the Registrar, The Dental Board of South Australia, Adelaide, Australia.



DENTAL ECONOMICS

"Please Stop Payment"

By M. L. Hayward, Hartland, N. B., Canada

The dentist had given an order for a new line to an unknown salesman, paid in advance by check, ascertained that he had been victimized, and promptly gave the bank a "stop pay" order.

A few days later the check came in, the paying teller looked up the stop pay orders on file, but, looking under the wrong letter, found nothing from the dentist and paid the check.

"It's your mistake, and you're bound to credit the amount back to my account," the dentist contended.

The teller pointed to a clause in the order, which stated that "the undersigned agrees to hold the bank harmless for said amount and for all expenses and costs incurred by it on account of refusing payment of said check and further agrees not to hold the bank liable on account of payment contrary to this request if same occur through inadvertence or accident."

"How do you get over that?" the teller demanded.

"I don't believe that the courts will permit a bank to protect itself in advance from its own carelessness," the dentist contended, sued the bank in the Massachusetts courts, and lost, according to the report of the case in *126 Northeastern Reporter*, 782.

"Is it illegal for a bank to contract against the negligence of its employees in failing to stop the payment? The word 'inadvertence' in the printed agreement embraces the effect of inattention, the result of carelessness, oversight, mistake, or fault of negligence, the condition or character of being inadvertent, inattentive, or heedless. The word 'accident' is used in the sense of a happening of an event without the concurrence of the will of the person by whose agency it was caused. It is manifest that the quoted words were intended to exonerate the bank from the kind of negligence shown by the record, and we are unable to see anything illegal, or anything opposed to public policy, in an agreement which relieves a bank so circumstanced from the result of the mere inattention, carelessness, oversightedness, or mistakes of its employees," was the reasoning of the Court.

Insurometer Diagnosis

A METER TO MEASURE YOUR LIFE INSURANCE NEEDS

By Henry H. McBratney, New York, N. Y.

(Editor's Note:—A little while ago a representative of one of the good insurance companies brought me a clever plan for finding out whether or not I had made sufficient provision for my family when I die, or for my own old age. I want readers of THE DENTAL DIGEST to see this plan, so he has prepared an article about it.

Briefly, every man should take account of his family's necessities and assets, and the Insurometer is a great help in doing so. Most attempts by professional men to make money by speculation are unprofitable and they certainly impede concentration on one's work and study. After twenty years of observation and aided by some of those unprofitable attempts on my own part, I am satisfied that for about 99 44/100% of dentists life insurance of the right kind, rightly bought, is a very desirable method of creating an estate.

Don't go at it blindly! Find out what you are doing. This plan will help.—G. W. C.)

Intelligent and correct diagnosis, so essential in medical science, is just as important in individual problems of the daily life of the professional man. Among the many every-day problems, that of provision for dependents when the income-producer passes on to the happier state and the preparation for the continuance of the income to the producer himself when age steals his present efficiency are ever present and foremost in the minds of every thoughtful person.

The most forceful and complete answer to these problems lies in life insurance as presented to the public today. Here is a guaranteed contract, which is so diversified in form as to cover entirely the individual needs and plans of each man.

But how many of us purchase this life insurance in absolute ignorance of our actual need for it! We are humanly susceptible to the high-pressure sales artist, who wears down our futile arguments, and with no set purpose we buy policy after policy until finally we declare we are overloaded, have enough, cannot pay the premiums, and finally close the book on further purchases.

And never once have we sat down and carefully figured out for what we are really taking out insurance, and the exact quantity needed. We have never realized that such an exact figure is obtainable, and in the same mathematical degree in which we arrive at our "need-figure" we can cover the needs entirely by life insurance alone in its various forms or in conjunction with other secured property which we may own.

A few of us have, perhaps, roughly estimated our *general* need of protection, but not our *specific* needs. And unless we are conscientious

about the matter, our estates in reality will not remotely resemble our anticipation.

Realizing the growing desire for this more correct measuring of individual needs, many of the life insurance companies have prepared data and charts to guide us. One in particular has been found to x-ray individual problems completely—the Insurometer.

The Insurometer intelligently and correctly diagnoses the rich man's and the poor man's need of financial protection. The popular conception that the amount of insurance a man should carry is based on the size of his income is entirely erroneous and not founded on facts. For example, a man whose income is \$10,000 per annum and whose only dependent is his wife, who has a clear title to her own home, needs much less insurance protection than another man who has the same income, but has two children, and has a mortgage on the home staring him in the face. Therefore, the only logical basis of arriving at the "need-figure" is mathematically to determine the specific requirements of the individual.

Certain sums of money are always needed at the death of the bread-winner. Other sums are necessary to put the estate in order and to relieve the inexperienced dependent of suddenly becoming a financial expert. And, most important of all, a guarantee of the continuance of an adequate income for those left behind is the duty of every man.

Provision for the lost earning power of "Old Man Me" when the autumn of life is reached is not a bad idea for every one to entertain when in the ascending scale of his earning capacity. Saving in this and other forms are available through life insurance.

Attainment of these purposes is possible by means other than life insurance, but never with the same guarantee of complete realization or the same speed, for once the "need-figure" is obtained, one premium deposit immediately creates this complete estate, which otherwise it would require years of systematic saving to accomplish.

And so the proper chart, such as the Insurometer, must credit the individual with such other property and secure investments before the "need-figure" is found.

A very interesting fact has been brought out by the use of the Insurometer, in that about one out of every twelve responsible and successful business and professional men is over-insured, if the property credited is worth at death what the man stated.

Thus the use of this medium of diagnosis serves a double purpose and puts at rest the eternal query, "Am I adequately providing for those dependents who look to me for the necessities, if not the luxuries, of life?"

100 William Street.

INSUROMETER

(Pronounced In-sur-QM-e-ter)
A Meter to Measure Your Life Insurance Needs

Applied to Conditions Obtaining in the Life of _____

of _____ Date of birth _____

(Please answer all questions very carefully and conscientiously, except those which manifestly do not fit your case.)

1. At your death, what amount of money do you estimate will be required to settle the following final expenses:

- | | | |
|---|-------|----|
| (a) Doctors', nurses' and drug bills | _____ | \$ |
| (b) Funeral expenses, including cemetery lot and monument | _____ | \$ |
| (c) Unpaid income tax | _____ | \$ |
| (d) Unpaid local taxes | _____ | \$ |
| (e) Federal estate taxes | _____ | \$ |
| (f) State inheritance tax | _____ | \$ |
| (g) Miscellaneous expenses always arising at death | _____ | \$ |
| Total | _____ | \$ |

2. What amount of money will be required to pay debts?

- | | | |
|---|-------|----|
| (a) Mortgage on home | _____ | \$ |
| (b) Mortgages on other real estate | _____ | \$ |
| (c) Loans at banks or elsewhere, including loans on life insurance policies | _____ | \$ |
| (d) Notes endorsed or on which there is a contingent liability | _____ | \$ |
| (e) Miscellaneous debts, judgments or claims | _____ | \$ |
| Total | _____ | \$ |

3. What amount of money will be needed to pay minimum living expenses for the family?

(Figure these needs on monthly basis.)

- | | | |
|---|-------|----|
| (a) Rent or upkeep of home, including taxes | _____ | \$ |
| (b) Food | _____ | \$ |
| (c) Clothing | _____ | \$ |
| (d) Water, heat, lights, ice and laundry | _____ | \$ |
| (e) Servants | _____ | \$ |
| (f) Education of children | _____ | \$ |
| (g) Recreation | _____ | \$ |
| (h) Church and charities | _____ | \$ |
| (i) Doctors, dentists, health and miscellaneous | _____ | \$ |
| Total | _____ | \$ |

4. What amount of money per month will be required to protect you and wife against old age dependency? _____ \$

5. What amount of money do you feel you should now begin saving monthly as your savings program? _____ \$

6. What amount of business life insurance do you feel should be carried on your life, payable to your firm, in order to stabilize your business, protect credit, and otherwise absorb shock of your death? _____ \$

7. Total lump sum needs (add totals of 1, 2 and 6) _____ \$

8. Total monthly income needs, \$ _____, or lump sum _____ \$

On basis of each \$1,000, yielding 6% per annum, or \$60.00 per year, or \$5.00 per month, monthly income needs may be converted into lump sum basis by dividing total monthly income needs by five, resultant total being in lump sum terms of thousands, as given above.

Grand total needs, gross (add 7 and 8) _____ \$

CREDITS:

1. What is total of all property owned by you, value based on actual sale price which property would probably bring under forced sale conditions? _____ \$

2. What is amount of all life insurance policies carried by you? _____ \$

Admitted total credits _____ \$

INSUROMETER CONCLUSIONS

1. Your total insurance needs are _____ \$

2. Your total credits are _____ \$

3. Net result _____ \$

RECOMMENDATIONS:

Date _____

Signature of Insurance Adviser _____

PRACTICAL HINTS

This department is in charge of V. C. Smedley, D.D.S., and George R. Warner, M.D., D.D.S., 610 California Building, Denver, Colorado. To avoid unnecessary delay, Hints, Questions and Answers should be sent direct to them.

NOTE—Mention of proprietary articles by name in the text pages of the DENTAL DIGEST is contrary to the policy of the magazine. Contribution containing names of proprietary articles will be altered in accordance with this rule. This Department is conducted for readers of the DENTAL DIGEST, and the Editor has no time to answer communications "not for publication." Please enclose stamp if you desire a reply by letter.

PRACTICAL METHOD OF TAKING BITE.—There is a long and a short method of taking a bite. One is the mush bite method which is not accurate. The other method is to make bite trays from the models after taking an impression. The latter method while the better of the two takes considerable time and the bite must be taken at a subsequent sitting after the models are made.

My method is to take an impression tray about the same size as required for the plaster impression. Smear some tooth paste on it and take a piece of medium heated wax and take an impression of the jaw that requires the plate. Let wax harden and then remove from the mouth and place in cold water. The impression can easily be removed from the tray and then wash off the tooth paste. Then try the wax tray in the mouth to see if it answers requirements and to judge the position of opposing teeth, if any be in place, or else the opposing jaw. Then take a roll of softened wax long enough to take the impression of the opposing ridge, from one-half to three-quarters of an inch thick, and place it on the cold tray of wax and after adapting it so that it will not slip off take the impression of the opposing teeth or ridge. With this method the patient will not protrude the lower jaw, which saves a lot of time adjusting the teeth when the patient returns for a try in.

The wax tray enables the dentist to have the bite opened the proper distance, which is somewhat difficult to judge, when one has the bite trays as built up on a model. With a mush bite the patient bites crooked one way or the other in trying to balance the softened wax. With the bite trays as built up on the model, the wax being hard, the patient is not able to close the jaws. Taking the bite as here suggested

seems to be accurate, and if the patient does not close exactly right it takes but a few minutes to do it over again.

DR. GEO. E. COX.

THE "TROUBLE" SYRINGE.—The old type of hypodermic syringe proves a source of annoyance due to the fact that the leather washers or washers of other materials become compressed and when the plunger is inserted the anesthetic backs out from around the packing nut. To get a good compression at the joint the plunger can be left out which causes the washer to swell. Then when the packing nut is screwed down very often a little particle will become detached from the washer and will clog up the needle, usually rendering it worthless.

This trouble can be easily overcome by cutting out a lead washer that fits the plunger fairly snug and placing it in the packing nut after placing the leather washers therein. When the leather washers are placed in the packing nut alone and it is screwed down tight the leather washers are forced out of shape into the barrel of the syringe.

If the end of the plunger is made cone-shaped on the carborundum stone it will slide in without biting the washers.

To those who prefer this type of syringe, this idea will prove quite useful.

DR. GEO. E. COX.

THE SLIPPING TOOTH.—Here is a little practical hint that originated as much with Dr. J. S. Zellers of Hooper, Neb., as it did with me. In extracting where there is danger of the tooth slipping through the forceps, instead of tying on cotton rolls or other similar devices, heat a little beeswax and fill the beaks of the forceps from the joint up. When applying the forceps to the tooth, press the tooth right into the beeswax. It is sticky enough so that it will not fall out of the forceps, and also makes it impossible for the tooth to slip through.

DR. H. A. HOWARD.

Editor Practical Hints:

The request of F. E. H. in the April issue for information about a burning mouth under red rubber, and your answer to the same, prompts this reply.

Rubber does not cause a burning mouth, but it is entirely caused by relief in the palate either intended or by an accident. I have proved this in hundreds of cases and anyone can do so by just melting some wax baseplate and painting it on the palate of the plate in such a way as to take a correct impression of the mouth so as to exclude air and suction.

I claim to be the Champion of the World in one thing, viz., I have had forty-two upper plates made for my own mouth, and all the early ones burned as though red pepper was sprinkled over the surface. After I became acquainted with Dr. George E. Everett and had a few plates made from impressions made by his Fluid Wax Method I can say that not one of them burned my mouth. I have told this from Maine to California and I have never found a dentist who had any trouble along this line after using the Everett Impression Method. I can prove to any person's satisfaction in my own mouth by making two dentures, one with and the other without relief, that the one will burn while the other will not, yet the vulcanite can be taken out of the same box.

I expect to give a clinic at Philadelphia, and will be glad to prove my statement herewith to any person asking me about it.

I would ask you to send a copy of this letter to F. E. H. and you are welcome to publish it if you desire.

DR. G. H. HENDERSON.

Editor Practical Hints:

Will you please give treatment for exposed and nearly exposed pulps which has proven most successful in your hands. I have been sealing phenol in very deep cavities, removing some decay after each treatment, finally filling with a soft sedative cement without exposing the pulp and covering this over with a harder cement with apparently good results in most cases. It is, of course, necessary to leave discolored dentin over pulp very often, and I am wondering whether any other antiseptic might be more suitable for sterilizing the tooth structure. Please discuss also pulps accidentally exposed.

Kindly give formula for a sedative cement, also for a root canal filling cement. You may answer either direct or through the *Digest*.

R. M. M.

ANSWER.—The treatment of exposed or nearly exposed pulps which has been followed in our practice for a great many years, and which I can highly recommend, is radically different from the practice you have been resorting to, both in principle and practice. Phenol, or any other escharotic or devitalizant, is absolutely contra-indicated for application in contact with or in proximity to any vital pulp (even though it is self-limiting in penetration as is the case with phenol).

It is not necessary or desirable to ever leave decayed dentine in a tooth, and that directly overlying a pulp is the most important to be thoroughly removed.

Our method is first to remove all decay under nerve block (or any other effective anesthetic), even though a pulp should be exposed or

partly excised in so doing. A large enough, very sharp bur or spoon excavator should be used for this purpose so that there is no danger or probability of plunging into the body of the pulp. After thorough removal of decay, if an exposure has resulted, the pulp should be permitted to bleed freely if it is inclined to do so. When the bleeding has ceased it should be carefully capped without pressure with a sedative cement consisting of the following formula: Eugenic acid, thymol, iodine, oxide of zinc, bismuth sub-nitrate.

We have thousands of pulps that have been capped in this way functioning normally in the mouths of our patients, some of them dating back fifteen or twenty years. The procedure is the same with a pulp accidentally exposed as when the exposure is caused by decay. The only difference being that with an accidental exposure the prognosis is ordinarily somewhat more favorable. We use and can highly recommend this same cement, mixed somewhat thinner than for pulp capping, for root canal filling after immediate pulp removal. This paste should be pumped into the canal with a twist broach revolving backward and forced into apposition to the walls of the canal and to the apex with a gutta-percha point of proper size inserted in the cement-filled canal with a gentle pumping motion. For the filling of canals that have become putrescent, I think the Howe method of sterilization, and either the above or the Callahan method for canal filling, is the proper procedure.—V. C. SMEDLEY.

Editor Practical Hints:

The enclosed model is to show the extent of erosion in the case of a male patient, age twenty-eight years. All the teeth are affected in a like manner and are quite sensitive.

Could you advise me as to the etiology and treatment of this condition?

J. W. W.

ANSWER.—Erosion seems to be of two distinct types, chemical, or true erosion, and mechanical, or abrasion. From the model you sent, I am inclined to the opinion that both forces are operative in this case. Those places that are more shallow may be treated to relieve sensitiveness quite effectively by repeated applications of silver nitrate, and those that are deep, such as the first bicuspid and first molar, for instance, should be filled with either gold foil, gold inlay or amalgam fillings.

Inquire very carefully into the patient's toothbrush habit. If he is using the forward-and-backward stroke and an abrasive tooth paste these things should be corrected. Instruct the patient to brush the

teeth with an up-and-down motion from the gums to the occlusal surfaces of the teeth, and the use of abrasive paste should be discontinued. If the erosion is purely chemical and not mechanical, it can undoubtedly be arrested to a considerable extent by a regulation of the diet; food rich in vitamins and mineral salts—whole grain bread, vegetables and fruits should be substituted for white bread, polished rice, potatoes, etc. Only a limited amount of meat should be eaten.—V. C. SMEDLEY.

Editor Practical Hints:

In your opinion is a four-tooth, upper anterior, all porcelain bridge practical—such bridge to consist of porcelain jacket crowns on the lateral incisors with all porcelain centrals fused in one piece?

From an esthetic viewpoint it would be ideal, but do you believe it will be strong enough to stand the stress to which bridges are ordinarily subjected? Would you use them?

C. B. H.

ANSWER.—Personally I would not attempt to make an all-porcelain bridge such as you describe, unless financial, ethical, esthetic or some other pressure were brought very heavily to bear upon me. But my brother has made a number somewhat similar during the past years, part of which are still standing up beautifully and giving splendid service.

They are very difficult to make and seat properly because of the element of shrinkage in the porcelain. The most satisfactory results have been obtained where he has made one-tooth bridges with a broken joint, with iridio-platinum lug resting in a notch for support of one end of the bridge.—V. C. SMEDLEY.



CORRESPONDENCE

1501 Kings Highway, Brooklyn, N. Y.

Editor, Dental Digest:

I have had a very interesting case at my office, and I should appreciate suggestions from your readers.

A man of about fifty years of age brought in his boy as a patient, and this is the story he told me about himself. He has no teeth in his mouth at all. He has had six or eight sets of teeth made by various dentists and cannot wear them because they gag him. He has tried very hard, but the longest he could keep the teeth in was one day. My examination shows that his mouth is very sensitive. I asked him to place his own finger in his mouth, and as soon as the finger touched the palate or even the lower ridge, he gagged. Upon examining the mouth and throat, I found that his tongue is extremely large with very large tonsils that look very much inflamed. They are rigid and have a number of cavities in them.

DAVID S. ROBINSON, D.D.S.

Mobile, Ala.

Editor, Dental Digest:

Speaking of freaks and fourth molars—how's the enclosed for an example?

J. R. GOODLOE.



DENTAL SECRETARIES and ASSISTANTS

Secretaries' Questionnaire

All questions and communications should be addressed to Elsie Pierce, care of THE DENTAL DIGEST, 220 West 42nd Street, New York City.

NOTE—HAVE YOU A BETTER WAY? HAVE YOU A TIME-SAVING SHORT CUT? DO YOU KNOW A "STUNT" THAT LIGHTENS THE WORK OR MAKES FOR EFFICIENCY IN THE OFFICE? IF SO, WRITE TO ELSIE PIERCE, CARE THE DENTAL DIGEST, 220 WEST 42ND ST., NEW YORK. YOU MAY HELP A NUMBER OF GIRLS WHO ARE JUST BEGINNERS—AND YOU KNOW HOW YOU NEEDED HELP DURING YOUR FIRST FEW MONTHS IN A DENTAL OFFICE. OR IF YOU NEED HELP NOW WRITE TO ELSIE PIERCE—SHE'LL HELP YOU.

I have been a dental assistant for five years and at the present time I have been only a few weeks in my second position. This is my problem. In my first position I did not have any experience in the financial side of the practice, working at the chair exclusively. My present employer wants me to see that all patients make a deposit on their work; also that they pay specified amounts as the work progresses. I realize that this is as it should be, because of the locality and the class of the majority of the doctor's patients, but I confess I do not know how to go about it or what to say in order not to offend and yet secure results. Please advise me.

R. B., Maine.

I believe that it is the opinion of those who have made a study of the financial problems of the dental office that at the very first sitting all arrangements should be made as far as possible, by the dentist and the patient, regarding the approximate cost of the service to be rendered and the method of payment for the service. If it is the rule of the office that deposits are required on all work, and that specified amounts are to be paid as the work progresses, and if this is thoroughly understood by the patient at the first sitting, it makes it easier for all concerned later on, for the request for payments then becomes a matter of routine, and the patient, having been advised as to what to expect, cannot take it as an offense, and certainly not from the assistant who is only carrying out the wishes of the doctor.

After that first understanding between the patient and the dentist, he should never have to refer to money again when talking to the patient. With tact and good judgment the assistant can find a way to approach each patient, but there can be no set rule or formula, for each person is a problem unto himself. If a patient is a bit brusque, *do not take it as a personal thing*, but keep smiling, be observing, and you will soon know what to say to each one.

May I suggest that the sending of a statement to the patients on the first of each month, whether the work is completed or not, helps matters very much. It keeps the patient posted on his account and incidentally impresses him with the fact that the business affairs of the office are not conducted in a haphazard manner. And it also makes it possible for the doctor to be "too busy" to give them future appointments, if patients do not pay as agreed. It is better to lose a part of the amount contracted for than to lose it all.

The doctor for whom I work and I both think that it would look more professional and very much neater for a dental assistant to wear a cap. Can you tell me of a style that is suitable and where they are obtainable?

M. E. P., Williamsport, Pa.

There is no doubt about a cap adding to the dignity and neat appearance of the dental assistant's uniform. As to a suitable style, I should recommend one that can be easily laundered, such as the type that opens out flat and buttons into shape. Any large department store sells nurses' uniforms and accessories.

When calling up a patient, which do you consider the better thing to say: "This is Dr. Blank's secretary talking," or "This is the girl in Dr. Blank's office?"

Will you please tell me what to say when some one wishes to talk to the doctor by telephone? Should I ask who is talking?

Bridgeport, Conn.

In answer to your first question, there can be no doubt that to say, "This is Dr. Blank's secretary talking," is preferable. I know that there are some dentists who speak of their young lady assistants as "the girl in my office" or "my office girl," but this is neither dignified nor in keeping with the professional morale which should be present in every dental office. To speak of the secretary or assistant as the office girl is as much out of place as to call her by her first name. I might mention that in years gone by the girl in the office filled a position comparable to that of the "maid" of today.

Replying to your second question, I would say that each office has its own particular routine. Your procedure should be controlled by the instructions which you have received from your employer. A great many dentists do not wish to answer a telephone call unless they know who is speaking, believing that if a person cannot give his name or state his business, he is not worthy of attention.

One of the principal reasons for the employment of a dental assistant is to save the doctor annoyance and time, therefore her first duty is to do so. There is no way in which valuable time can be wasted more effectively than over the telephone.

I always turn eagerly to the Secretaries' Questionnaire and find something interesting as well as helpful. I should like to tell you of something I have found which greatly facilitates mounting x-ray films, and which may be helpful to other dental assistants. I had difficulty in mounting them quickly, so now I use the eraser end of a pencil, being very careful not to touch that part of the film showing the apices of the roots, as this might make a blur that would spoil it for diagnostic purposes. Perhaps someone else has found this too, but failed to pass it on.

M. O., Ohio.

I submit to you a positive method for the removing of iodine stains from office linen, which I trust will prove helpful:

One teaspoon of photographer's hypo or acid-fixing powder, dissolved in one-half pint of water, when poured on iodine stains, completely removes them within a second. For this purpose it is not necessary to mix a new solution each time, as the solution does not lose its effect.

E. E., Rochester, New Hampshire.

Ammonia such as can be purchased in any grocery store, commonly known as household ammonia, can be used for this same purpose. Immerse the stained portion of the linen in the ammonia for a moment, then rinse in clear water.



Annual Dinner

OF THE

EDUCATIONAL AND EFFICIENCY SOCIETY FOR DENTAL ASSISTANTS,
FIRST DISTRICT, NEW YORK, INC.

The fifth annual dinner of the Educational and Efficiency Society for Dental Assistants was held on May 19, 1926, at the Hotel Astor, New York City. The program was conducted by Miss Agnes F. MacNeil, Vice-President of the Society, who acted as toastmistress.

Dr. R. Ottolengui, President of the Dental Society of the State of New York, was a guest of honor. He paid a splendid tribute to our President and founder, Juliette A. Southard, who is also President of the American Dental Assistants Association, and in whose honor the dinner was given, by saying that one of her characteristics was in accordance with one of the titles of the Society, namely, *Efficiency*. He complimented the members on the remarkable work accomplished through the study classes and the Clinic Club and wished the Society continued success.

A very interesting paper was read by Ann P. Marvel, a member of the organization, the title of which was *Our Society*. Miss Marvel spoke of the aims and ideals and many activities of the Society, stating that its purpose was to raise the standard of service to the dental profession and to bring to the dental assistant a realization of her responsibilities as a professional woman.

Miss Anna Sykora, Treasurer of the Society and General Secretary of the American Dental Assistants Association, was called upon to give a greeting and spoke of the endeavors of the national organization to help all dental assistants.

Lillian R. Sire, Director of the Division of Aliens, Department of Labor, State of New York, was the speaker of the evening. Her topic *The Alien Problem Within New York State* was very interesting. Interspersed with many heart-throb stories and experiences, it brought a new conception of our alien problem.

Dr. John T. Hanks, President of the First District Dental Society, New York, brought a greeting from that Society as well as a tribute to the Dental Assistants' Society for the splendid work it had achieved and could achieve in the future.

The toastmistress then introduced Juliette A. Southard, who briefly outlined a visit she had made a few weeks before to a number of the constituent societies affiliated with the American Dental Assistants Association. She told of the wonderful progress made by the various organizations, and also of the interest and cooperation afforded the dental assistants by the prominent members of the dental profession

throughout the country, and she earnestly urged the dental assistants to continue their constructive work.

Among the guests of honor who addressed the gathering were Dr. F. T. Van Woert, Director of the School of Dental and Oral Surgery, Columbia University, who expressed his pleasure at having been a lecturer at one of the regular meetings of the Society and his approval of the work being accomplished. Dr. A. P. Burkhart, Secretary of the Dental Society, State of New York, and Dr. H. J. Burkhart, Director of the Rochester Dental Dispensary, both expressed their pleasure at being present and commended the Society on its splendid achievements.

Dr. George Wood Clapp, Editor of *The Dental Digest*, gave an interesting talk, as did Dr. L. W. Dunham, Associate Editor of *The Dental Digest*.

Dr. Henry Fowler, First Honorary Member and instructor of the Class in Public Speaking and Parliamentary Procedure, gave a message of encouragement and inspiration.

Regrets at their inability to be present were read from Dr. Sheppard W. Foster, President of the American Dental Association, and Mrs. Foster; also from Dr. H. E. Friesell, Dean of the Dental School, University of Pittsburgh, and from Dr. C. N. Johnson, Editor of *The Journal of the American Dental Association* and Honorary Member of the Society.

Dr. Anna V. Hughes, Director of the School of Hygiene, Columbia University; Miss Christine Redefor, President of the Dental Hygienists Association, State of New York; Miss Katherine Hollis, President of the Alumnae Association of Dental Hygienists, Columbia University; and Miss Jean Graham, President of the Dental Hygienists Association of New York City, were numbered among the guests of honor.

April Meeting

OF

THE EDUCATIONAL AND EFFICIENCY CLINIC CLUB

The regular meeting of the Educational and Efficiency Clinic Club was held at the office of Dr. W. H. Hynard, 40 East 41st Street, New York City, on April 19, 1926. There was a large attendance and each one present took an active part in the general discussion that contributed to the events on the program.

Aside from the arrangement and conduct of clinics which demonstrate the efficiency of the capable dental assistant and the possibilities

for her service in the dental office, it is the aim of the Clinic Club to search out more efficient methods of dental office conduct, from the assistant's viewpoint, and to aid her in the solution of any troublesome problem that may be confronting her. To this end a questionnaire has been compiled and on this evening the following subjects were considered and answered—the sterilization of root canal instruments and the preparation of a tray for root canal work; the problem of keeping investment compound and plaster free from bubbles when investing inlays or pouring models; the preparation of a local anesthetic such as novocain. Much helpful information and many valuable suggestions were brought out in the discussion.

May Meeting

OF

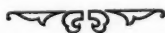
EDUCATIONAL AND EFFICIENCY SOCIETY FOR DENTAL ASSISTANTS,
FIRST DISTRICT, NEW YORK, INC.

On Tuesday evening, May 11, 1926, the Educational and Efficiency Society for Dental Assistants, First District, New York, held its closing meeting for the 1925-1926 season at the Academy of Medicine, 17 West 43rd Street, New York. This meeting was for members only and was well attended.

The reports given by the officers and chairmen of the various committees showed that the Society had had a successful fifth year.

The election of officers for the 1926-1927 season took place and the following were elected: Juliette A. Southard, President; Agnes F. MacNeil, Vice-President; Anna H. Sykora, Treasurer; Robina McMurdo, Secretary; Mae L. Bennett, Chairman of Executive Committee; Martha B. Keit, Chairman of Membership Committee; Cora Brown, Chairman of Visiting Committee; Emily Campbell, Chairman of Reception Committee; Anna Neulinger, Chairman of Library Committee.

The next regular meeting of the Society will be held on Tuesday, October 12, 1926, at 8 p. m. The Society meets on the second Tuesday of the month from October to May, inclusive, at the Academy of Medicine, New York. A cordial welcome is extended to the members of the dental profession and to their assistants.





EXTRACTIONS



No Literature can have a long continuance if not diversified with humor—ADDISON

(Friend—to Dentist)—Say, Doc, I have a terrible pain in my head, and I don't know what to do for it.

(Dentist)—Why don't you get it filled.

History tells us that New York City was sold for \$24.50 by the Indians. The 50 cents was for Brooklyn.

(Desperate Suitor)—I can't live without your daughter, sir.

(Briggs)—Well, don't come to me about it—I'm no undertaker!

It was an old Greek philosopher who hung this sign on his door:

"All those who enter here do me an honor—those who do not, a favor."

(Watson)—Say, Jim, I hear that old Whangdoodle called you a woodenhead.

(Jimson)—No, not quite that. He just said, "put on your hat, here comes a woodpecker."

A countryman came to Boston to visit some relatives and to see the sights. He remained until patience on the part of his hosts, a married couple, ceased to be a virtue.

"Don't you think, my dear fellow," remarked the husband one day, "that your wife and children must miss you?"

"Hadn't thought of that," was the calm reply. "Thanks for the suggestion; I'll send for them."

All Henry has to do is to make 'em. The dealers do a lot of advertising to sell 'em. One dealer had this sign on the back of his car: "This is a Ford. Four out of five get it!"

"May I see Lieutenant Barker, please?" she asked at the hospital. She was very pretty.

"We don't allow anyone but relatives to see the patients. Are you a member of his family?"

"Why, yes," she answered blushing. Then boldly: "Why, I am his sister."

"Oh, really," answered the matron. "I am so glad to meet you! I am the lieutenant's mother."

Scenery is that green stuff the family looks at and admires, while dad keeps his eyes on the road.

AS THE SMALL BOY THINKETH!

What is more lovely than a school-house in vacation!

An Italian, having applied for American citizenship, was being examined in the naturalization court.

"Who is President of the United States?"

"Mr. Coolidge."

"Who is Vice-President?"

"Mr. Dawes."

"Could you be President?"

"No."

"Why?"

"Mister, 'scus me, please, I vera busy worka da mine."

HOT WEATHER MEDITATIONS

It is permissible and logical for a meditative man, contemplating the stupidity of mankind in general, to retire within himself and concentrate his thoughts upon some subject or object that would tend to lessen the discomforts of the summer's sweltering and insufferable heat.

In this connection, I think I could almost go and live with the snail.

It is a modest and silent animal.

It is contemplative and philosophical.

It eats lettuce and has no views on prohibition.

It does not shake its hips to jazz noises.

It has never heard of Doc. Cook, Bernard Shaw, Mussolini, Senator Borah, or other publicity merchants who disturb our equanimity, but proceeds in a forward direction and even motion upon its stomach, gently waving its horns and meditating.

It does not sing, or write poetry.

It never gabbles about Freud, or squawks about art.

It never sits on committees, runs for Congress, theorizes on the inhabitants of Mars, or otherwise assaults the shrinking silence by emitting words, prepositions or other parts of speech.

When confronted with the latest volume of the "Outline of History," it proceeds to walk across it on its stomach and lets it go at that.

When at bay, it meets inevitable fate with dignity, sobriety and placidity. All of which leads me to believe that I could go and live with the snail during the oppressive hot weather.

DIETETICS and HEALTH

Advice About Food in Hot Weather

It is surprising to see the different ideas held by physicians and laymen regarding food requirements during hot weather. One will advise that the food be about the same all the year round because the system is used to it. If you make a change in your diet during the hot weather you may become "picky" about your food, and not eat enough to sustain you. That, as a matter of fact, many people find that the heat makes them feel weak, simply because they are actually weak from want of food.

Another will suggest that you should change your diet during the hot weather, should avoid meat, and eat vegetable and starchy foods, cereals, and soft fruits which contain water, salts and acids, which are cooling to the system.

Still another will suggest that you eat the same food winter and summer but that you cut down the amount in summer by from 10 to 25 per cent.

What are you going to do with all this "variety" of advice as to foods in hot weather, writes Dr. J. W. Barton in the *N. Y. Evening Telegram*. My suggestion is that it depends to a great extent upon your own experience in the past, upon your age, upon your occupation and your form of recreation.

The growing boy or girl living an outdoor life is going to need all-around food; that is, meat, eggs, starches and fats. They will need them for energy and for growth. Perhaps the fats may be cut down somewhat in the summer.

The young man or woman living an outdoor life of activity, either in work or in play, would likewise be wise to keep up the all-around diet, with perhaps a slight decrease in fats. Young men and women not inclined to outdoor exercise would be wise to cut down slightly on meat and fats during the hot weather.

Middle-aged men and women whose occupation or recreation does not call for much exercise outdoors would be wise to try and cut meat to the lowest possible point during the hot weather, and their foods by 10 to 15 per cent.

Older folks would be wise to follow their example. I believe these

simple suggestions will appeal to your common sense when you remember just what the different foods do for you.

The meat and eggs repair tissue worn out by work or exercise, vegetables and bread supply heat and energy, while the fats also supply heat and energy, protect the other tissues to some extent, and store energy for future use. You can thus see that your food requirements will, as I said before, depend upon your age and your work or exercise.

*Praise God, be quiet,
and goe a-fyshynge.*

—IZAAK WALTON.

FUTURE EVENTS

The twenty-fifth annual meeting of the AMERICAN SOCIETY OF ORTHODONTISTS will be limited to one business session because of the First International Orthodontic Congress, which is to be held in New York City, August 16-20, 1926, and of the Seventh International Dental Congress, which is to be held in Philadelphia, August 21-27. This session will convene on Monday morning, August 16th, at 9:30, at the Hotel Commodore, New York City, for the transaction of all business that ordinarily is cared for during an annual session of the Society. Members are urged to be prompt in attendance and to bring before this, the only session, any matters that must receive the action of the Society.

WILLIAM C. FISHER, *President*,
501 Fifth Avenue, New York City.
WALTER H. ELLIS, *Secretary*,
33 Gates Circle, Buffalo, N. Y.

There will be a CLINIC ON "TIME-SAVERS" at the Seventh International Dental Congress at Philadelphia, August 21-27, 1926. Your "pet" Time-Saver will help others and others will help you.

Address

STATION R. A. C.,
Plant Building, New London, Conn.

THE NATIONAL ALUMNI CHAPTER OF PSI OMEGA FRATERNITY will meet in Philadelphia, Pa., Saturday, August 21, 1926, at the new Pennsylvania Athletic Club, which will be headquarters.

The general session will be held at 2 p. m. on Saturday, August 21, for initiatory work, exemplification of degrees, business session and election of officers. The annual banquet for members and ladies will be held at 6 p. m. Thursday, August 26, 1926, at the Pennsylvania Athletic Club. Make your reservations early, securing tickets at headquarters before Thursday noon.

ARTHUR R. McDOWELL, *Grand Master*,
344 Fourteenth Street,
San Francisco, Cal.

THE NATIONAL ASSOCIATION OF DENTAL EXAMINERS will meet in Philadelphia, August 21, 1926, at the Bellevue-Stratford Hotel.

W. E. HOCKING, *President*,
Devil's Lake, N. D.
GEO. L. POWERS, *Secretary*,
Memphis, Tenn.

The seventh annual tournament of THE AMERICAN DENTAL GOLF ASSOCIATION will be held at Philadelphia, August 27, 1926. The annual Calcutta Pool Dinner will be held Sunday evening, August 22, at the Penn Athletic Club.

THOS. P. HINMAN, *Secy.-Treas.*,
Fourth National Bank Building,
Atlanta, Georgia.

APPOINTMENTS TO DENTAL CORPS OF THE U. S. NAVY

A competitive examination for appointment to the Dental Corps of the U. S. Navy will be held September 13, 1926, at the U. S. Naval Medical School, Washington, D. C. Appointees must be citizens of the United States, between 21 and 32 years of age at the time of appointment, which may be one or two months later than the date on which the examination will be completed. Candidates must submit with their applications certificates of birth and citizenship, or graduation from an accepted high school, or the equivalent, and from a dental school, and two or more letters testifying to good habits and moral character. Applications should be addressed to the Chief of the Bureau of Medicine and Surgery, Navy Department, Washington, D. C. The examinations will be both theoretical and clinical and the usual duration is from seven to ten days. No allowance can be made for the expense of persons appearing for examination.

The following were appointed members of the AMERICAN COMMITTEE OF THE FIFTH INTERNATIONAL STOMATOLOGICAL CONGRESS of the Association Stomatologique Internationale (A. S. I.), to be held in Paris in 1927: Dr. Alfred J. Asgis, *Chairman*; Dr. G. Reese Satterlee, *Treasurer*; E. B. Hardisty, *Recorder*; Dr. Oliver T. Osborne, New Haven, Conn.; Dr. George W. Mackenzie, Philadelphia, Pa.; Dr. Edward C. Briggs, Boston, Mass.; Dr. Wm. G. Shemeley, Philadelphia, Pa.; Dr. Anthony Bassler, New York City; Dr. Louis Ottofy, Chicago, Ill.; Dr. Weston D. Bayley, Philadelphia, Pa.; Dr. W. E. Hocking, Devil's Lake, N. D.; Dr. F. M. Dimas Aruti, San Juan, Porto Rico; Dr. Wm. G. Downs, Jr., Evansville, Ind.; Dr. J. M. Murphy, Temple, Texas.

DR. ALFRED J. ASGIS, *General Secretary, A. S. A.*,
135 Elliot Place, New York City.

